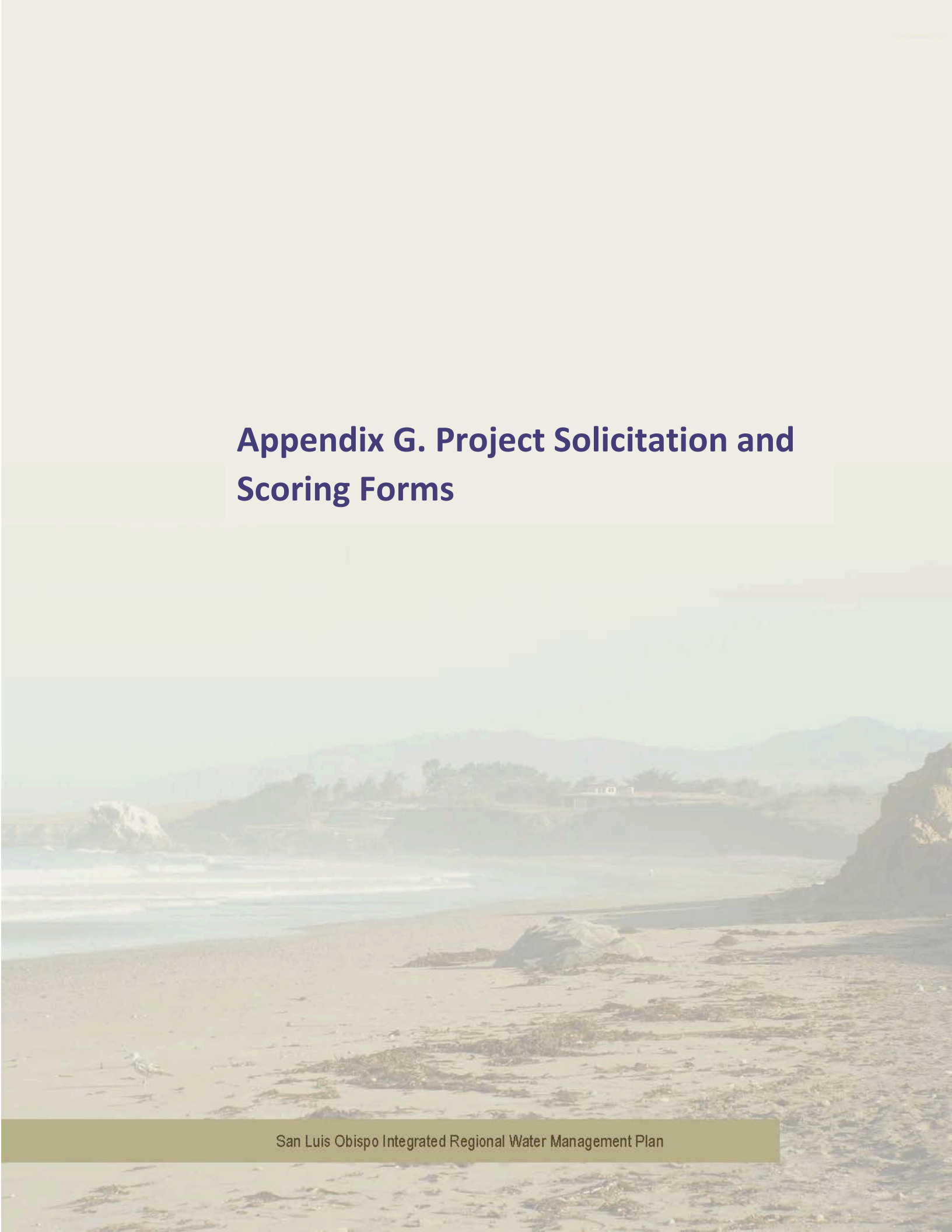
Appendix G. Project Solicitation and Scoring Forms



G-1 Project Selection Brochure

San Luis Obispo IRWM Plan Update

Full Project List Finalized

SAN LUIS OBISPO REGION'S DRAFT IRWM PLAN VISION STATEMENT

Create a united framework among SLO County Stakeholders for sustainable water resource management.

IRWM PLAN MISSION

Facilitate regional plans, programs, and projects to further sustainable water resource management.

Upcoming Events

FEBRUARY 2014

- Focus Group Meeting

MARCH/APRIL 2014

- RWMG Meeting
- Public Draft Release of IRWM Plan

MAY 2014

- Collect public comments

JUNE/JULY 2014

- Address public comments

AUGUST/SEPT 2014

- Finalize and adopt IRWM Plan

Since January 2013, the Regional Water Management Group (RWMG) has been working with water users throughout the County, the San Luis Obispo County Flood Control and Water Conservation District (District), and Subregional Working Groups to prepare the San Luis Obispo County IRWM Plan Update (Plan Update). This effort has been coordinated with the Water Resources Advisory Committee to ensure the Plan Update addresses county-wide issues, as well as local issues through coordination with local agencies and the three Subregional Working Groups which represent the North County, North Coast, and South County.

PROJECTS TO IMPLEMENT THE PLAN

During the first half of 2013, the San Luis Obispo County IRWM Plan Update established goals and objectives related to water resources planning.

To achieve those goals, the region's participants' and stakeholders' implement projects and programs. Recent activity on the Plan Update included the creation of the **2013 IRWM Plan Project List** (which is presented in this brochure).

The IRWM Plan includes both planned **projects and programs**, and describes how those projects and programs address the IRWM Plan goals, and specifically how each will be implemented. The IRWM Plan also maintains a list of water resources **concepts** (projects in the preliminary or planning stages) for stakeholders to consider over long term Plan implementation.

PROJECT SOLICITATION PROCESS

San Luis Obispo County stakeholders have been actively engaged in the IRWM Plan Update's project solicitation and review process. From June to December 2013, the Project Management Team (PMT), under the direction of the Regional Water Management Group (RWMG), solicited water resources concepts and projects/programs from stakeholders. Altogether, agencies, organizations, and

individual stakeholders submitted 91 abstracts for the 2013 call for projects and programs proposed to add value to San Luis Obispo County's integrated management of water resources in the areas of water supply, groundwater management, flood management, ecosystem restoration, and general water resources management.

COMPILING THE FULL PROJECT LIST

The PMT reviewed and initially ranked the submittals in accordance with the RWMG-approved project review guidelines (follow the IRWMP quicklink on the County's Water Resources site at http://www.slocountywater.org/). Some submittals were either not IRWM-related or were integrated into another project submittal. Of the 91 submittals, 81 were added to the Full Project List - 52 of those were classified as concepts and 29 were classified as projects/programs. Concepts, programs, and projects from the 2007 IRWM Plan were also reviewed, 34 of which were added to the Full Project List as well. As a result of this project screening, the 2013 IRWM Plan Full Project List includes 115 projects.

CREATING THE FINAL IRWM PLAN PROJECT LIST

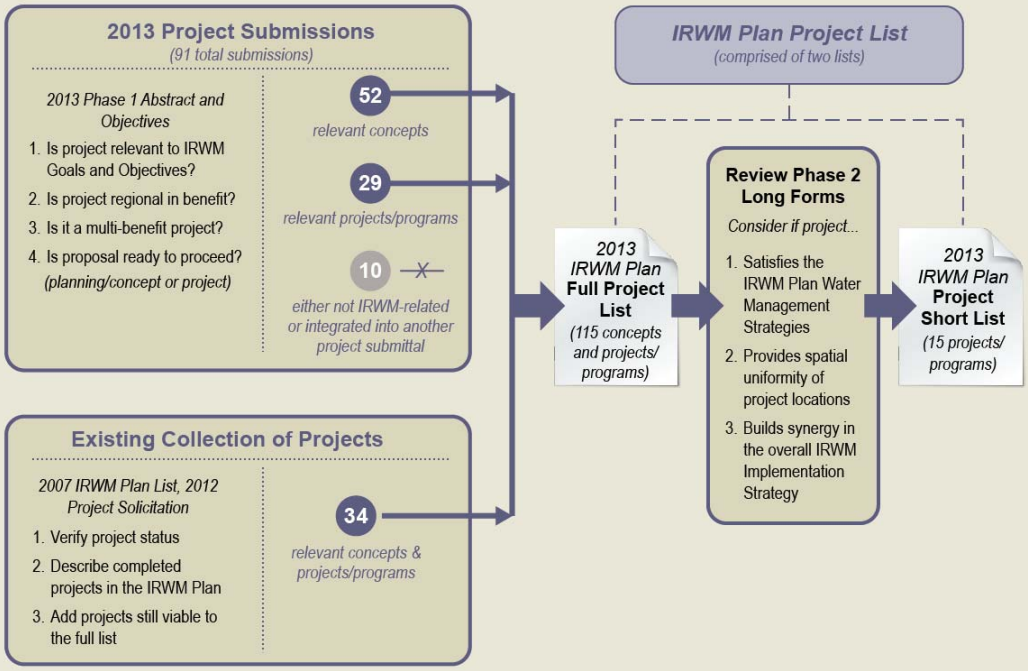
At the October 2nd RWMG meeting, the PMT presented the IRWM review process and resulting Full Project List. Various integration opportunities were noted at that meeting. The RWMG asked the RWMG Working Group (and Project Sponsors) to meet and integrate/finalize the IRWM Plan Project List (includes both the Full Project List and Project Short List).

The RWMG Working Group held that public meeting on October 16th. The whole process and resulting integrated IRWM Project List was published and sent out to the RWMG and Interested Stakeholders in order to seek input, inform the public, and solicit comments. This brochure memorializes the results of this six month process to develop a Full Project List and Project Short List.

Why Two Lists?

The purpose of having two lists is to satisfy the State's requirements of an IRWM Plan (Final IRWM Project List), and to constantly maintain a list of the region's most current projects for use in selection upon notification of regional or local funding opportunities (Full Project List). The Full Project List will be an appendix to the IRWM Plan, and will be updated on an as-needed basis (at a minimum of every two years). All projects included on this list are considered to be a part of the IRWM Plan and will be considered for future funding and implementation opportunities.

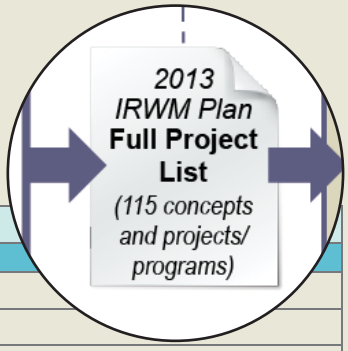
The figure on page 3 visually describes how the collection of projects from the 2007 IRWM Plan, the 2012 project solicitation, the Phase 1 2013 Project Abstracts (and Objective Worksheet), and the Phase 2 Project Long Forms were combined to form the Full Project List and which was further screened to create the Project Short List.



Forming the IRWM Plan Full Project List and Project Short List

FULL PROJECT LIST

The Full Project List below identifies the 115 IRWMP-related concepts and projects/ programs by Sub-Region, and includes the project sponsor. Projects followed by an asterisk also show up on the Project Short List.



Full Project List

#	Project, *Sponsor*
Multi-Regional Submittals	
1	Conservation Planning for Coastal Watersheds, *Coastal San Luis Resource Conservation District*
2	Agricultural Water Management and Conservation Program, *Coastal San Luis Resource Conservation District*
3	Closing Priority Conservation Data Gaps, *Coastal San Luis Resource Conservation District*
4	Countywide Watershed and Creek Signage, *Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)*
5	Countywide Watershed Planning Phase II, *Coastal San Luis Resource Conservation District*
6	Desalination Study, *Various*
7	Development of Basic Salt & Nutrient Management Plans, *Various*
8	Feasibility Study for Recycled Water for Agricultural Use, *Coastal San Luis Resource Conservation District*
9	Federal Flood Insurance Program Compliance Study, *San Luis Obispo County Flood Control and Water Conservation District*
10	Invasive Species Program, *County of San Luis Obispo*
11	Livestock & Land Program*, *Coastal San Luis Resource Conservation District (CSLRCD) and Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)*
12	LID Pilot Program*, *US-LTRCD*
13	Mined Lands Remediation Program, *San Luis Obispo County Flood Control and Water Conservation District*
14	Raising Santa Margarita Dam, *Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS) (predecessor to future California Water District)*
15	Rancher 2 Rancher Program, *Coastal San Luis Resource Conservation District*
16	Regional Implementation of Groundwater Management Activities, *Various (depends on basin)*
17	SLO Communities Water Enhancement Program, *Central Coast Salmon Enhancement*
18	Stormwater Rewards Rebate Program, *Coastal San Luis Resource Conservation District*

Full Project List, *cont.*

#	Project, *Sponsor*
19	Urban Landscape Water Management and Conservation Program, *Coastal San Luis Resource Conservation District*
20	Water Conservation Corps, *California Conservation Corps (CCC) – San Luis Obispo Center _ (Other Partners TBD)*
21	Waterways Vegetation Management Program, *San Luis Obispo County Flood Control and Water Conservation District*
22	Wetland and Vernal Pool Mapping, *County of San Luis Obispo*
North Coast Submittals	
23	8th Street Upper Aquifer Well and Nitrate Removal Facility*, *Los Osos Community Services District*
24	Cambria CSD Water System Improvements, *Cambria CSD*
25	Chorro and Morro Groundwater Basin Management Plans, *Morro Bay National Estuary Program*
26	Chorro Creek Ecological Reserve Floodplain Restoration Project, *Morro Bay National Estuary Program*
27	Chorro Valley Master Water and Waste Water Plan, *City of Morro Bay*
28	Cambria Pump Station, County of San Luis Obispo, *Department of Public Works*
29	Conservation Planning for North Coast Landowners, *US-LTRCD*
30	County Service Area 10 – Clearwell Tank Roof Replacement, *San Luis Obispo County Flood Control & Water Conservation District*
31	County Service Area 10A Water System Improvements (Integrates 2 submittals: New 200k Gallon Storage Tank; and Storage Tank Roof Replacement), *San Luis Obispo County Flood Control & Water Conservation District*
32	Los Osos Community Stormwater Master Plan, *Los Osos CSD*
33	Los Osos Landfill Remediation – Pump and Treat, *County of San Luis Obispo*
34	Los Osos Water System Improvements, *Los Osos CSD*
35	Los Padres CCC Center – Stormwater LID Treatment Project*, *Morro Bay National Estuary Program*
36	Morro Bay–Cayucos Sanitation District Salt and Nutrient Management Plan, *City of Morro Bay*
37	Morro Bay NPDES Illicit Discharge Detection and Elimination Ordinance, *City of Morro Bay*
38	Morro Bay Wastewater Treatment Facility Upgrade, *City of Morro Bay*
39	North Coast Watershed Plans, *US-LTRCD*
40	Rehabilitation–Installation of Retention Ponds in North Coast (store & release), *US-LTRCD*
41	S&T Mutual Water Co–Golden State Water Co Intertie, *S&T Mutual Water Company*
42	San Simeon CSD Water System Improvements, *San Simeon CSD*
43	San Simeon Small Scale Recycled Water Project, *San Simeon CSD*
44	San Simeon Wastewater Treatment Facility Upgrade, *San Simeon CSD*
45	SLO County Drought Protection & Climate Change Preparedness Pilot Project, *GREENSPACE – The Cambria Land Trust*
46	Streambank Stabilization & Restoration in Santa Rosa Creek, *US-LTRCD*
47	Water Conservation Partnerships in Chorro Valley, *Morro Bay National Estuary Program*
North County Submittals	
48	21ST Street Reservoir Reconstruction, *City of Paso Robles*
49	Atascadero Creek Watershed Management Plan, *City of Atascadero*
50	Atascadero Lake Treatment System, *City of Atascadero*
51	Atascadero Wastewater System Upgrade, *City of Atascadero*
52	Attiyeh Ranch Conservation Easement Project*, *Land Conservancy*
53	City of Paso Robles Lake Nacimiento Water Treatment Plant Construction*, *City of Paso Robles*
54	Community Based Social Marketing – Paso Groundwater Basin Community (water quality & quantity)*, *US-LTRCD*
55	County Service Area 23 (CSA 23) Water Reliability Program, *County of San Luis Obispo – Public Works Dept*
56	County Service Area 7A – Oak Shores – Interception Sewer System Replacement, *County of San Luis Obispo*
57	Creston State Water Project Turnout, *Requires formation of Water Purveying Entity*
58	CSA 16 (Shandon) Water System Improvements (integrate 4 submittals: Waterline – Replace Centre Street; Waterline – Upsize 1st Street; Waterline Loop N. 2nd to N. 3rd Streets; New Storage Tank), *San Luis Obispo County Flood Control & Water Conservation District*

Full Project List, *cont.*

#	Project, *Sponsor*
59	Emergency Water Turnout for Heritage Ranch CSD, *San Luis Obispo County Flood Control & Water Conservation District*
60	Evaluating Land-Surface Subsidence and Potential Groundwater Storage Losses as Part of Assessing Proposed Water Banking Sites in Paso Robles Groundwater Basin, *USGS*
61	Groundwater Monitoring Program and Modeling Program for the Paso Robles Groundwater Basin, *Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS) (predecessor to future California Water District)*
62	Improving On Farm Water Management Through Demonstration, Research & Outreach of Precision Ag BMPs* (integrated 2 submittals: Tracking and Conserving Vineyard Irrigation Water in the Paso Robles Groundwater Basin; North County Precision Irrigation Research Program_ Precision Agriculture), *Vineyard Team & US-LTRCD*
63	Interlake Tunnel Project, *Nacimiento Regional Watershed Management Advisory Committee*
64	Nature Center & Conservation Hub, *US-LTRCD*
65	North County Fertilizer Regions Precision Agriculture*, *US-LTRCD*
66	North County Strategic Plan, *Institute for Advanced Technology & Public Policy, Cal Poly, San Luis Obispo*
67	Off Stream Storage within the North County, *Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS) (predecessor to future California Water District)*
68	Phase 2 – Lake Nacimiento Potable Water Treatment Plant, *City of Paso Robles*
69	Pilot Project Impact of Santa Margarita Lake Discharges on Groundwater Basin, *Unknown*
70	Recycled Water Treatment and Distribution System – Phase 1, *City of Paso Robles*
71	Recycled Water Treatment and Distribution System – Phases 2_3, *City of Paso Robles*
72	San Miguel CSD Water System Improvements*, *San Miguel CSD*
73	San Miguel Flood Control Program, *San Luis Obispo County Flood Control and Water Conservation District*
74	Supplemental Water Supplies for Paso Robles Groundwater Basin (integrates 5 submittals: Community Water Systems for Subdivided Regions Overlying the Paso Robles Groundwater Basin; Irrigation Distribution System at Paso Robles Airport Area; Paso Robles Groundwater Basin Restoration and Basin Recharge; Paso Robles Groundwater Basin In-Lieu Recharge Study and Preliminary Layout), *TBD*
75	Sustain SLO North: A Water Conservation Stewardship Plan for North County, San Luis Obispo, *US-LTRCD*
76	Templeton CSD East Side Force Main and Lift Station Project, *Templeton CSD*
77	Templeton CSD Water System Improvements, *Templeton CSD*
78	Toad Creek flood control, restoration and basin recharge, *US-LTRCD*
79	Toad Creek Waterway Management Program, *SLO County Flood Control and Water Conservation District*
80	Upper Salinas River Basin Water Conservation/Conjunctive Use Project*, *Templeton CSD*
81	Upper Salinas Watershed Plans, *US-LTRCD*
82	Vertical Well Project for HRCSD, *Heritage Ranch CSD*
83	Water-wise program (with target applied irrigation rates), *US-LTRCD*
South County Submittals	
84	Alternatives Analysis and BMP Implementation Plan for the Oso Flaco Watershed, *Coastal San Luis Resource Conservation District*
85	Arroyo Grande Creek Channel Waterway Management Program, *San Luis Obispo County Flood Control and Water Conservation District, Central Coast Salmon Enhancement*
86	Avila Beach Wastewater System Upgrade, *Avila Beach CSD*
87	Beach Street Alley Waterline Replacement, *Oceano Community Services District*
88	Conjunctive Use and Groundwater Banking Evaluation, *Oceano Community Services District*
89	Edna Valley Groundwater Basin Study, *Various*
90	Flood Control Zone 1/1A Waterway Management Program, *San Luis Obispo County Flood Control & Water Conservation District*
91	Flood Control Zone 3 – Lopez WTP Sludge Bed 1 & 2 Upgrades, *San Luis Obispo County Flood Control & Water Conservation District*
92	Floodplain and Riparian Enhancement Feasibility Plan for Arroyo Grande Creek, *Coastal San Luis Resource Conservation District*
93	Lopez Lake Spillway Raise Project, *Zone 3 Agencies (Cities of Arroyo Grande, Grover Beach and Pismo Beach, Oceano Community Services District and County Service Area 12)*

Full Project List, *cont.*

#	Project, *Sponsor*
94	Lopez Pipeline Improvements, *Northern Cities Management Area (NCMA) Agencies: Oceano Community Services District (OCSD), City of Arroyo Grande, City of Grover Beach, City of Pismo Beach*
95	Lopez Water Project Habitat Conservation Plan, *San Luis Obispo County Flood Control and Water Conservation District*
96	Lopez Water Treatment Plant Membrane Rack Addition*, *San Luis Obispo County Flood Control and Water Conservation District*
97	Mapping the saltwater-freshwater interface in southern San Luis Obispo and northern Santa Barbara County, California, *USGS*
98	Meadow Creek Restoration Plan (integrates: Meadow Creek Flood Reduction), *Central Coast Salmon Enhancement (and Coastal San Luis RCD)*
99	Mid-Higuera Bypass , *City of San Luis Obispo*
100	Nacimiento Water Project Energy Recovery Turbine, *City of San Luis Obispo*
101	Nipomo Area Water Reuse Plan, *Nipomo CSD*
102	Nipomo CSD Supplemental Water Project, *Nipomo CSD*
103	Oceano Community Services District Water System Improvements, *Oceano CSD*
104	Oceano Drainage Improvement Project – Hwy 1 & 13th Street*, *County of San Luis Obispo, Department of Public Works*
105	On-Farm Water Quality Enhancement and Conservation Plan for Coastal Watersheds, *CSLRCD*
106	Pismo Beach Recycled Water Treatment Plant*, *City of Pismo Beach*
107	Pismo Creek Watershed Program, *Central Coast Salmon Enhancement*
108	Recycled Water Distribution System Expansion*, *City of San Luis Obispo*
109	Recycled Water Master Plan Update, *City of San Luis Obispo*
110	Regional Recycled Water System (Pismo Beach and SSLOCSD) (integrates Pismo Beach Recycled Water System), *City of Pismo Beach*
111	San Miguelito Wastewater System Upgrade, *San Miguelito MWC*
112	Santa Maria Groundwater Basin Model, *NCMA Agencies (Oceano Community Services District, Cities of Arroyo Grande, Grover Beach and Pismo Beach), Nipomo CSD*
113	See Canyon Watershed Management Plan, *Central Coast Salmon Enhancement*
114	Southland Wastewater Treatment Facility Upgrade, *Nipomo CSD*
115	Steelhead 4(d) Program, *Central Coast Salmon Enhancement*

PROJECT SHORT LIST

The Project Short List identifies those projects/programs that are technically feasible and strategically suited to be fully described in the IRWM Plan. Many projects were not included because they did not provide enough data or did not address enough objectives (per State Guidelines) to adequately incorporate information throughout the IRWM Plan Update itself. That differentiation does not note a project as being less significant. It simply means that the project will not be incorporated into various IRWM Plan sections. All projects will still remain on the Full Project List, and are considered to be supported by this IRWM Plan.

Final IRWM Project Short List

#	Project, *Sponsor*	Primary Reason for Inclusion on Final IRWM Project List
1	Livestock & Land Program, *Coastal San Luis Resource Conservation District (CSLRCD) and Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)*	Included for its multi-objective regional benefits and water quality enhancement while gaining private property owner volunteer participation for purposes of environmental stewardship.
2	LID Pilot Program, *Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)*	Included for its Low Impact Development (LID) public education and outreach, as well as providing monetary rebate incentives to private property owners to implement LID projects.
3	North County Fertilizer Regions_ Precision Agriculture, *Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)*	Included for its wide public educational value and regional water quality benefits through volunteer participation by private property owners with reduced fertilizer cost incentives.
4	Attiyeh Ranch Conservation Easement, *Land Conservancy*	Included for public and environmental stewardship values; both resulting in the protection of the watershed and endangered flora and fauna species in the region.

#	Project, *Sponsor*	Primary Reason for Inclusion on Final IRWM Project List
5	Upper Salinas River Basin Water Conservation/Conjunctive Use Project, *Templeton CSD*	Included because of the multi-objective elements of improving recycled wastewater for higher beneficial use as a source for groundwater recharge and potable supplies in the Salinas River Underflow.
6	Community Based Social Marketing, *Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)*	Included due to its low cost high education value over a broad region, enlisting support of private property owners to take ownership of their environment, and improving sustainable farming and business practices.
7	Improving On Farm Water Management Through Demonstration, Research & Outreach of Precision Agricultural Best Management Practices, *Vineyard Team and Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)*	The project is a teamed effort by two project sponsors. Included for its high public educational value and regional water demand reduction benefits over a critically impacted groundwater basin, and offers change in irrigation practices through volunteer participation by private property owners with reduced pumping cost incentives.
8	City of Paso Robles Lake Nacimiento Water Treatment Plant Construction, *City of Paso Robles*	Included due to its maximizing existing supplemental water supplies in a critically impacted groundwater basin, and use as a conjunctive supply for drought protection and effects of climate change in the region.
9	San Miguel Critical Water System Improvements, *San Miguel CSD*	Included due to the Disadvantaged Community (DAC) need for critical water system improvements.
10	8th Street Upper Aquifer Well and Nitrate Removal Facility, *Los Osos Community Services District*	Included for its multi-objective values of managing a critical groundwater basin subjected to continuous degradation of water quality from septic systems (nitrates) and sea water intrusion, and the local collaboration between the agencies and public using a vetted management plan.
11	Los Padres CCC Center - Stormwater LID Treatment Project, *Morro Bay National Estuary Program*	Included for its multi-objective benefits of environmental stewardship, LID educational opportunities, and the conversion of private lands to restore a rich ecosystem of flora and fauna.
12	Oceano Drainage Improvement Project - Hwy 1 & 13th Street, *County of San Luis Obispo, Department of Public Works*	Included due to multi-objective elements of providing a DAC with health and safety along with water quality, groundwater recharge, and flood attenuation.
13	Lopez Water Treatment Plant Membrane Rack Addition, *San Luis Obispo County Flood Control and Water Conservation District*	Included due to increased use of existing surface water supplies and reduction in groundwater use in a constrained groundwater basin shared by multiple agencies and private well owners.
14	Recycle Water Distribution System Expansion, *City of San Luis Obispo*	Included due to increased recycled water use in a DAC with the benefit of reducing groundwater pumping in a constrained groundwater basin.
15	Pismo Beach Recycled Water Project, *Cities of Arroyo Grande, Grover Beach and Pismo Beach and the Oceano Community Services District*	Included due to increased recycled water use through construction of a recycled water treatment plant. Recycled water will be made available for the South County Sub-Region using the existing wastewater treatment facility and construction of a recycled water distribution system.

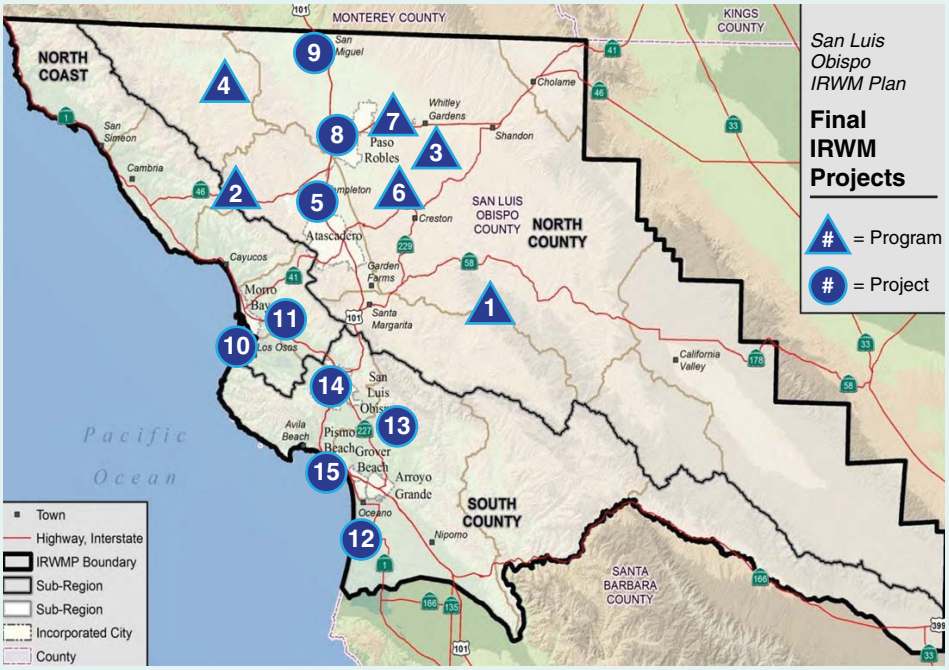
A detailed project analysis compiled as a Project Review White Paper (PWP) evaluated each project's strategic value in meeting the State Objectives and Resource Management Strategies, as well as the IRWM Plan's Water Management Strategies, and its Goals and Objectives. The PWP is a resource document developed for purposes of project selection and documenting detailed material to be used in populating the various IRWM Plan sections. The approach presented in the PWP will be to update and maintain a current project list as part of the IRWM Plan's implementation.

Geographic significance of project location is considered in project selection to ensure each Sub-Region is equally represented in the IRWM Plan. The map on the back page identifies the approximate location of the capital projects and programs (typically projects spread across large areas and are positioned at the approximate center of the benefit areas) included on the Project Short List.

NEXT STEPS

The concepts and projects presented in this brochure will be published in the 2013/14 IRWM Plan Update. The project list will be revisited upon DWR publishing the Prop 84 Round 3 IRWM Implementation Grant Funding Project Solicitation Package (expected in mid- to late-2014). At that time, the RWMG and Interested Stakeholders would conduct a solicitation, evaluate projects, and determine a competitive suite of projects suitable for that grant funding source, as needed. Project sponsors and stakeholders are also encouraged to seek other sources of funding. Thank you for helping the SLO County IRWM Region to implement projects and programs that continue to improve local water resources management.

Final IRWM Project Short List Project Locations



Thank you for your continued support and participation in the IRWM Plan development.

For additional information about the IRWM Plan Update and access to the electronic documents associated with this effort, visit:

http://www.slocountywater.org/

If you have any questions, please do not hesitate to call Carolyn Berg, *San Luis Obispo County Department of Public Works,* (805) 781-5536.

REGIONAL WATER MANAGEMENT GROUP

- San Luis Obispo County
- San Luis Obispo County Flood Control and Water Conservation District
- California Men's Colony
- Cambria Community Services District
- City of Arroyo Grande
- City of Grover Beach
- City of Morro Bay
- City of Paso Robles
- City of Pismo Beach
- City of San Luis Obispo
- Central Coast Salmon Enhancement
- Coastal San Luis Resource Conservation District
- Heritage Ranch CSD
- Land Conservancy
- Los Osos CSD
- Morro Bay National Estuary Program
- Nacimiento Regional Water Management Advisory Committee
- Nipomo CSD
- Oceano CSD
- Templeton CSD
- San Miguel CSD
- San Simeon CSD
- S&T Mutual Water Company
- Upper Salinas - Las Tablas Resource Conservation District

GEI Consultants

Prepared by GEI Consultants with support from Fugro Consultants, Dudek, Gutierrez Consultants, and Hollenbeck Consulting

G-2 Abstract forms, Project Objectives Worksheets, and Phase 2 Long Forms

Memo

To: Carolyn Berg

County of San Luis Obispo, Department of Public Works

From: Michael Cornelius

CC: Jonathan Goetz

Date: August 16, 2013

Re: San Luis Obispo Integrated Regional Water Management (IRWM) Plan Project Characterization, Solicitation and Prioritization Methodology White Paper

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Attachments

1. Project[1] Characterization, Solicitation, and Prioritization Methodology

This white paper documents the updated approach to characterizing projects, and the solicitation and prioritization methodology adopted for purposes of collecting and ranking projects for the Updated 2013/2014 Integrated Regional Water Management (IRWM) Plan (Updated Plan). The Updated Plan differs from the adopted 2007 IRWM Plan by moving the focus of its content to Project Elements rather than the projects themselves. Project Elements are "building blocks" of region-specific activities derived from a thorough evaluation of the State's Resource Management Strategies (RMS) (See **Section F** of IRWM Plan), and applied local Water Management Strategies (WMS), which consist of activities to promote the Goals and Objectives of the Updated Plan.

1.1 Updated Approach to Project Characterization

An example of the "building blocks" concept can be applied to a water conservation project, say Reduce Water Demand through Irrigation Efficiency. **Figure 1-1** illustrates this concept by showing the "building blocks" of the Irrigation Efficiency project definition starting with how the project elements tie back to the DWR Statewide Objective of Reducing Water Demand. DWR has provided Statewide Objectives and the RMS to further assist the regions in defining their region-specific objectives by providing clear (and preferred) strategies. In the case of reducing water demand, RMS includes agricultural or urban water-use efficiency. The IRWM Plan has taken both the DWR Statewide Objectives and the RMS, and combined them into a single IRWM Plan WMS of Water Conservation (defined as applying across all water-use sectors). Project Elements then become the means to achieving the WMS of water conservation by:

1. Finding a funding mechanism for the project.
2. Including the project in a regional UWMP for region-wide implementation.
3. Ensuring that any water conservation project is written into drought management and supply interruption plans.

[1] Please note that the term "project," on its own, is used to infer concepts and projects/programs.

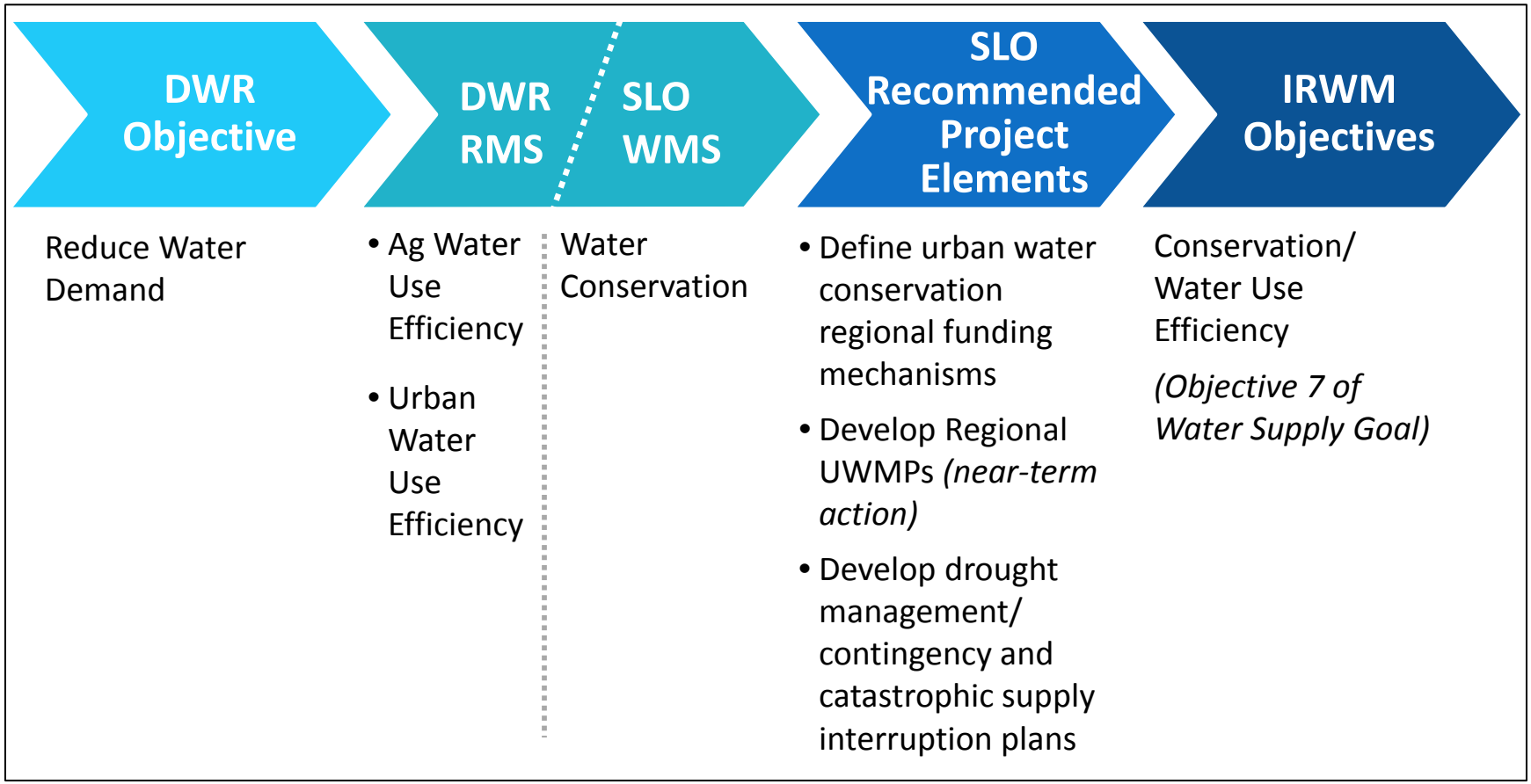


Figure 1-1. Irrigation Efficiency Building Blocks

In the manner described, the Irrigation Efficiency project is now fully defined by the Project Elements and the project meets the minimum requirement of satisfying one or more of the local IRWM Objectives (i.e., Conservation/Water use Efficiency). This change in approach to how projects and programs are characterized and incorporated into the Updated Plan ensures that the Updated Plan does not become stale as projects are implemented or fall off the list over time from lack of progress.

The Updated Plan seeks to provide an easily updated and manageable list of concepts and projects/programs. The Project Solicitation Process includes two phases of solicitation (Phase 1a and Phase 1b), followed by Final Evaluation and Selection, and updating of the project list, as shown in the following task outline:

Task 1. Regional Project Solicitation and Review Process
   a. Phase 1a: Abstract forms (for concepts and projects/programs)
   b. Phase 1b: Project Objectives Worksheet (for concepts and projects/programs only)
   c. Phase 2: Project Descriptions (for top ranking projects/programs only)

Task 2. Final Evaluation and Project Selection for Grant Applications
Task 3. Biennial Project List Update (or more often as needed)

The related documents will be housed in various sections of the IRWM Plan. Abstract forms, Project Objectives Worksheets, and Phase 2 Project Descriptions will be included in Appendix __. Certain information from these submittals will be used to populate summary discussions in IRWM Plan Sections __, __, __, and __. This ensures that even concepts or low ranking projects/ programs will still be memorialized in the IRWM Plan for consideration by stakeholders.

1.2 Task 1 - Concept and Project/Program Solicitation and Scoring

The following text briefly describes the solicitation phased process, the review and ranking methodology, the final evaluation and selection process, and the project list update process.

1.2.1 *Regional Project Solicitation and Review Process*

The first step in updating the IRWM Plan Project List is to conduct an IRWM region-wide project solicitation. This entails sending out notifications of the intent to update the IRWM Project List and subsequently collecting information on local concepts and projects/programs relevant to IRWM. There are two primary phases to collecting information: project abstract (Phase 1a) and objectives worksheets (Phase 1b); and full project description forms (Phase 2).

1.2.1.1 Phase 1a: Abstract Forms (for concepts and projects/programs)

First, the RWMG opens a project solicitation for stakeholders and accepts submittal of Phase 1a Abstract Forms. The Phase 1a Abstract Form, **Attachment 1**, is intended to solicit sponsors for all relevant concepts and projects/programs currently being considered throughout the

SLO County IRWM region. Phase 1a Abstract Forms collect basic information on concepts and projects/programs, and open up the opportunity for all project types regardless of their current status towards implementation. The forms do, however, provide a pass or fail screening to capture only those concepts and projects/programs in the Updated Plan which satisfy the following two sets of conditions:

Condition #1…**Is it IRWM Related?** Does it satisfy one or more of the questions below?

1. **Is it regional? (geographically, or has regional benefit)** – does the abstract show a wider project purpose and benefit that crosses land use and local political boundaries?

2. **Is it being sponsored or developed by multiple agencies?** – does the abstract provide evidence of the project having multiple-agency support or funding?

3. **Is it a multi-benefit project or program?** – does the abstract describe the project's complementary benefits with other projects, programs, or activities taking place (or planned), and/or does the project result in meeting multiple goals of the IRWM program?

4. **Is it a project supporting a critical water supply or water quality need within a Disadvantaged Community (DAC) boundary? (note: must serve within the DAC boundary)** – does the abstract describe the nexus between the project benefits, state identified DAC, and how the project helps to address critical water supply/quality needs of the DAC[2]?

Condition #2…Does it Include Related Goals? Does the project meet one or more IRWM Goals (i.e., Water Supply, Ecosystem/ Watershed, Groundwater, Flood Management and Water Management)?

The Project Management Team (PMT), comprised of District Staff and RWMG Working Group representatives, performs a preliminary review to determine if one or more of the questions are satisfied and then uses the Abstract Form information to initiate contact with the passing projects to complete Phase 1b of the solicitation process described below.

1.2.1.2 Review of Concepts

Concepts are initially reviewed based upon the submittal of a Phase 1a Abstract Form. Note: "Concepts" include high level ideas for improving local water resources, and/or projects/programs that are in the initial phases of planning and therefore have minimal documentation and study associated with them. The PMT performs an initial pass/fail scoring of the concepts using a formal review scoring sheet, **Attachment 4**. The scoring sheet also assesses the concept's alignment with the IRWM Plan's Goals to provide a means of organizing the concepts for further review in Phase 1b. Phase 1b Project Objectives

[2] The Proposition 84 State Grant Guidelines provide reference to a single map for the determination of what communities are defined as DAC: <http://www.water.ca.gov/irwm/grants/resourceslinks.cfm>.

Worksheets are used for scoring and ranking the concepts (optional for concepts, only if sponsor wants concept ranked). The scoring methodology (see **Section 1.2.4**) at this level is based on how well the concept aligns with the IRWM Goals and Objectives. The scoring uses the sponsor's description of how the concept meets the Objectives in order to determine level of benefit to each IRWM Goal. After the Phase 1b scoring (described under **Section 1.1.1.1**), Concept List review and ranking is complete at this point, as Concepts by their very nature do not have sufficient information available to score their relevance to the Updated Plan. The ranked Concept List will be included in the Updated Plan appendix.

Concepts in their earliest stages may not be able to adequately complete a Phase 1b worksheet, but would be left on the list unranked, in order to maintain potential future concepts to pursue.

1.2.1.3 Review of Projects/ Programs

Projects/programs are initially reviewed and ranked based upon the Phase 1a Abstract Form submitted. The PMT performs an initial ranking to score projects/programs that passed the screening test using a formal review scoring sheet, **Attachment 4** and **Attachment 5**. The scoring sheet assesses the project/program's alignment with the IRWM Plan's Goals to organize the initial project information for completion of Phase 1b. Phase 1b Project Objectives Worksheets are used for the overall scoring and ranking of the projects. The Phase 1b scoring methodology (see **Section 1.1.1.1**) at this level is based on how many Objectives a project/program meets and how well it aligns with the IRWM Goals.

To the extent possible, the scoring and ranking is an automated scoring process. The Automated Scoring Process takes place in the Excel spreadsheet environment using a VBA macro to read responses and score non-subjective categories where the response is clearly defined (e.g., yes or no). In some cases, the length and content of the response is scored and then adjusted based on an actual read by the PMT reviewers.

1.2.1.4 Phase 1a Concept and Project/ Program Abstract Scoring Methodology

The concepts and projects/programs that achieve a passing determination in Phase 1a (Project Abstract) described above, are screened through an automated scoring process applied to rate how well each concept and project/program meets the IRWM Goals, and by doing so, be able to categorize each concept and project/program. This scoring is used only as a means of focusing review on the best of the concepts and projects/programs and helping sponsors to see if the project fits well in the IRWM program; no ranking is performed and only forms that do not apply to the IRWM program are thrown out at this step in the review process.

The automation step includes:

- How well the concept and project/program aligns with the IRWM program.
- The primary focus of the project.

After the automation, each concept and project/program is reviewed to ensure it is

categorized correctly and that the provided information is consistent with the score achieved.

1.2.2 *Phase 1b-Concept and Project/Program Objectives Worksheet*

As noted above, "Concepts" include high level ideas for improving local water resources, and/or projects/programs that are in the initial phases of planning and therefore have minimal documentation and study associated with them. Concepts are set aside to be included in the IRWM Plan with the few selected project "concepts" highlighted as being good candidates for future IRWM projects, and may be good candidates for future planning grants when combined with identified projects/programs. The "Projects/Programs" list includes projects/programs that are further along in the planning, design, and/or implementation phases, and are therefore more "ready-to-proceed" and could be better candidates for more near-term IRWM Plan implementation.

The next critical step (Phase 1b) is moving the concept and project/program definitions through the determination of the exact translation of project benefits to the IRWM Goals and Objectives. As a required step in the grant development process, this information is necessary to the selection of the top ranking projects for inclusion in the 2013 IRWM Plan Update.

The project sponsors associated with the list of projects and programs are asked to complete a Phase 1b Project Objectives Worksheet (**Attachment 2**). Concept level project sponsors are invited to complete the Phase 1b Project Objectives Worksheet (**Attachment 2**), but are not required to do so. This would be completed if the concept sponsor would like to have its concept included on a ranked list of concepts.

The worksheet lists all IRWM Plan Objectives, requests that the sponsor indicates which objectives are met by their project, and provides a brief description of how that objective is met. This allows the PMT to understand how the applicant sees the project relating to specific IRWM Plan Objectives, which will facilitate more accurate scoring as described in **Section 1.1.1.1**.

Upon receiving and scoring the Project Objectives Worksheet, the resulting Phase 1 Project List is created to form the list of sponsors who are invited to participate in Phase 2 of the Project Solicitation Process.

1.2.2.1 Phase 1b Goal and Objectives Scoring Methodology

Scoring of the concepts and programs/projects for purposes of ranking is accomplished by how many of the Project Objectives Worksheet questions are fully populated by the sponsor and the related subject matter of the response. In an effort to keep the scoring simple and equitable across all five IRWM goals, each goal is given a total score of 20 points. Each Objective in the Goal is given the fraction of points assigned to each objective to equal the score of 20 points. For example, the Water Supply Goal has ten (10) Objectives, so each Objective has a point value of 20 divided by 10 or 2 points per objective.

Concepts or projects/programs that respond to a specific Goal's Objective are also

immediately given a Goal point of 5 as a means of tracking how the project offers cross-goal benefits. The sum of Goal Points (maximum of 25 points for 5 Goals) is added to the sum of Objective Points to achieve the total Goal and Objectives score for the project (see **Attachment 5** Phase 1b Project Objectives Scoring Sheet).

1.2.3 *Phase 2 Project Descriptions*

1.2.3.1 Phase 2 Readiness-to-Proceed Categorization

The final step before selecting Phase 2 Project List, is to determine "readiness to proceed". Each project or program is compared to the questions shown in the table below (concepts are not included in this step). Please note that the points system is to help guide the PMT during review; however, the results are simply reported as "high", "medium", and "low" categorizations.

1.2.3.2 Phase 2 Project Ranking

Projects/programs identified in Phase 1b are reviewed and ranked, considering the Phase 1b scoring as well as the readiness-to-proceed categorization, as described in **Section 1.1.1.1** and **1.2.3.1**. The resulting top-ranked projects/programs are requested to submit Phase 2 Project Descriptions, or "long forms," included as **Attachment 3**. The long form is an in-depth description of the project/program, its benefits, the economics analysis performed on the project, how the project aligns with State IRWM strategies and requirements, local IRWM Plan Objectives, etc. For that reason, only the top-ranked projects, which are more likely to be used to develop competitive grant applications, are asked to develop this information to be included in the Updated Plan, even if they are considered as ready to pursue grant funding at the present time.

The PMT works closely with the top-ranked projects to support their completion of the long form (see **Attachment 3**). Given the expected level of effort and budget for PMT support in the Phase 2 project submittals, the number of projects included in the Phase 2 Project List is approximately 20 percent of the total projects submitted or 10 projects, whichever is smaller. Direction from the RWMG will help to guide the number of projects/programs ultimately collected at Phase 2.

Other project sponsors not among the top-ranked list are encouraged to submit Project Descriptions, but are not required and the long forms may not be reviewed as part of the Updated Plan. All Project Description long forms are to be kept on file; however, and reviewed when the RWMG decides to develop a future grant proposal.

1.2.4 *Overall Scoring for Both Concepts and Projects/Programs*

One last step in scoring the concept and project/program is the response to the following three questions:

1. Does the Concept and project/program have multi-agency support or sponsorship? (If yes, score of 5)

2. Is the Concept Regional or Inter-Regional (i.e., includes adjacent IRWM Areas)? (If yes, score of 5)
3. Does the Concept support a DAC? (If yes, score of 5)

Table 1-1. Readiness to Proceed Scoring

Readiness to Proceed Factor Considered	Question Considered	Basic Scoring	Overall Characterization by Score
Timeliness	Do project partners have the ability to act quickly to implement the project or program without the need for new agreements or additional funding?	5 – Immediate, < 1 year 3 – Near Term, 1-3 years to develop 1 – Mid Term, 3-6 years to develop 0 – Long Term, > 6 years to develop	**High (18-25)** **Medium (10-17)** **Low (0-9)**
Technical Feasibility	Does the project have technical documentation to evaluate the technical feasibility of the project?	5 – Provides detailed documentation, including reconnaissance, and feasibility studies and completed engineering designs 3 – Shows to be partially documented, and has reconnaissance, and/or feasibility studies, but incomplete or partial designs 0 – The project is not well documented, does not have reconnaissance, and/or feasibility studies and has not been designed.	
Environmental Compliance	Does the project have environmental documentation and clearance?	5 – Existing studies and completed environmental documents. 3 – Some studies or plans to complete studies; A clear plan to complete environmental documentation. 0 – The project is not well-documented, does not have reconnaissance and/or feasibility studies and has not been designed.	
Permitting	Does the project have permits or a plan to obtain permits?	5 – Permits are obtained or are in the process 3 – Permit requirements are known and there is a plan and schedule in place. 0 – Permit requirements are not known and there is no plan or schedule.	
Funding	Are the project funding sources well defined?	5 – Financial plan and commitments are well defined; clear resource commitments to maintenance and operations 3 – Financial plan under development; required rate payer and/or funding agency approval; no defined resource commitments to maintenance and operations. 0 – No financial plan and commitments established; no resources defined for maintenance and operations.	

Because the answers to these questions are important in the DWR IRWM Guidelines and grant preparation effort, all three questions are weighted heavily to place projects in the affirmative higher on the list supplementing the Goals and Objectives scoring described above. At this stage, the concepts and projects are ranked for purposes of a combined Project List, including all concepts and projects/programs, and submitted to the Region's Stakeholders for public comment. The Project List will be reviewed and adopted by the RWMG prior to progressing to Phase 2.

1.3 Task 2 - Final Evaluation and Project Selection for Grant Applications

As noted in Flowchart 1 below, project sponsors have various possible implementation approaches available in order to move forward with project/program implementation. Some of these approaches are IRWM Plan-supported, while others are Local Agency-supported. The ranked Project List will be used when the RWMG determines a suite of projects/programs eligible for potential grant funding applications.

1.3.1 *Informal Appeals Process*

During the RWMG review, the group will make sure to confirm that consensus is developing or that disagreements are properly identified, discussed, and resolved. In the event of disagreements, if unresolved, they will be stated in writing so that disagreements are clearly defined and so that decision makers are properly informed during final plan approvals or in the event of a need for a formal hearing to resolve the disagreement (see formal appeals).

1.3.2 *Formal Appeals Process*

Please refer to the RWMG Memorandum of Understanding Article 4.5 "Decision Making", which establishes a formal appeals process.

1.3.3 *Implementation Approach Category 1 – IRWM Regional Approach*

IRWM-supported projects/programs likely to be included in a regional IRWM grant application are high ranking projects/programs with the needed documentation and multi-agency support, but may be lacking adequate funding in-place to implement the project or would benefit from IRWM grant funding. This implementation approach category seeks projects/programs with a high readiness-to- proceed and generally requires the RWMG to group the project with other projects into a cohesive, competitive IRWM grant funding implementation proposal where synergies can be shown through construction of the suite of projects/programs. This category of project requires the highest level of scrutiny to ensure the project adds a high degree of value to a grant proposal and creates synergies amongst other high ranking projects. Selection of these projects is based on how well the projects can be combined to create a winning grant proposal.[3]

[3] This process is intended to offer the maximum amount of flexibility to allow the RWMG leeway to determine the best suite of projects for a given grant source.

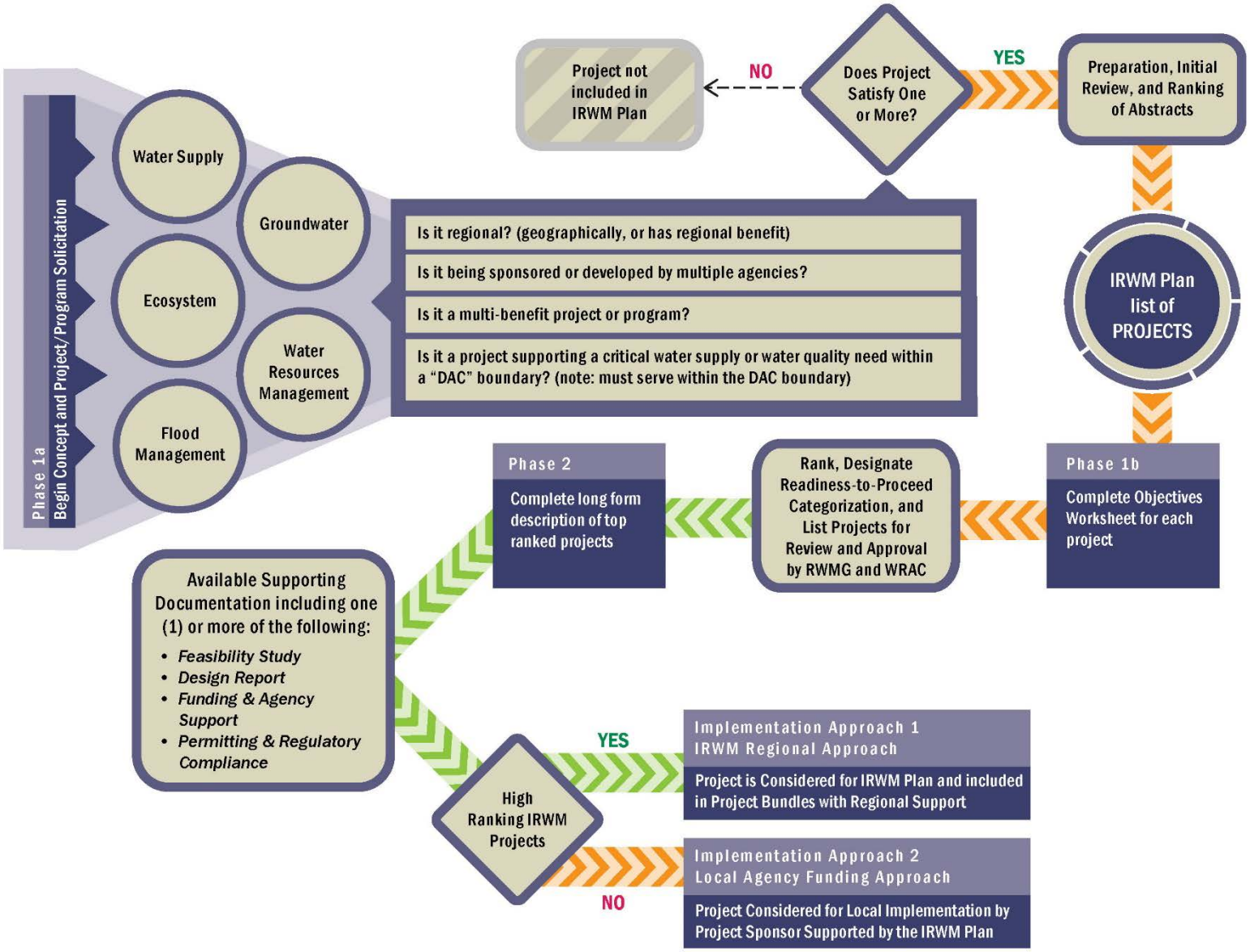


Figure 1-2. Project Scoring and Ranking Process (Flowchart 1)

1.3.4 *Implementation Approach Category 2 – Local Agency Funding Approach*

The second implementation approach requires local agencies or organizations to champion an effort to seek local funding and/or other grant funding sources outside of the IRWM program, in order to ensure project/program implementation. This might be well-suited for lower ranking projects/programs or single agency projects with limited regional benefits. These projects/programs have a high level of sponsorship from the IRWM Plan (being included on the Project List) that requires the agency to seek other funding mechanisms such as non-IRWM state grant programs or loans. The project sponsor is asked to complete the grant proposal without County support to allow other regional projects to be developed to their fullest.[4]

1.4 TASK 3 - BIENNIAL PROJECT LIST UPDATE

As part of Plan implementation, the project list will be updated on a biennial basis (or more often if needed) to keep the list of projects included in the Plan current. The project solicitation process described above will be used to update the project list. The ranking order of the top projects is published as part of the Updated Plan with future IRWM implementation grant opportunities offered to the top projects/ programs best suited, and so on down the list.

If the region creates an online database, concepts, projects and programs can be submitted, and/or existing concepts, projects and programs can be updated, between solicitation periods. These submittals would not be scored and ranked until the next Biennial Project List Update.

1.5 FUTURE IRWM IMPLEMENTATION GRANT OPPORTUNITIES

If future IRWM implementation grant guidelines differ from the previous 2012 guidelines, additional information is requested of the top ranking projects (See **Flowchart 2** below) of both concept and project/program implementation categories, and all projects are ranked again to account for the new requirements. If there are insufficient projects on the list, as determined by the RWMG, the top ranking concepts are solicited to resubmit an abstract to update the available information. Projects that are included in a grant proposal that do not win remain on the list for future IRWM grant opportunities. If all top-ranked projects are exhausted, a new call-for-projects is approved by the RWMG and this same process and ranking methodology is applied.

[4] It is important to note that an IRWM grant proposal is about bringing a set of projects together to achieve the highest level of scoring based on the grant guidelines.

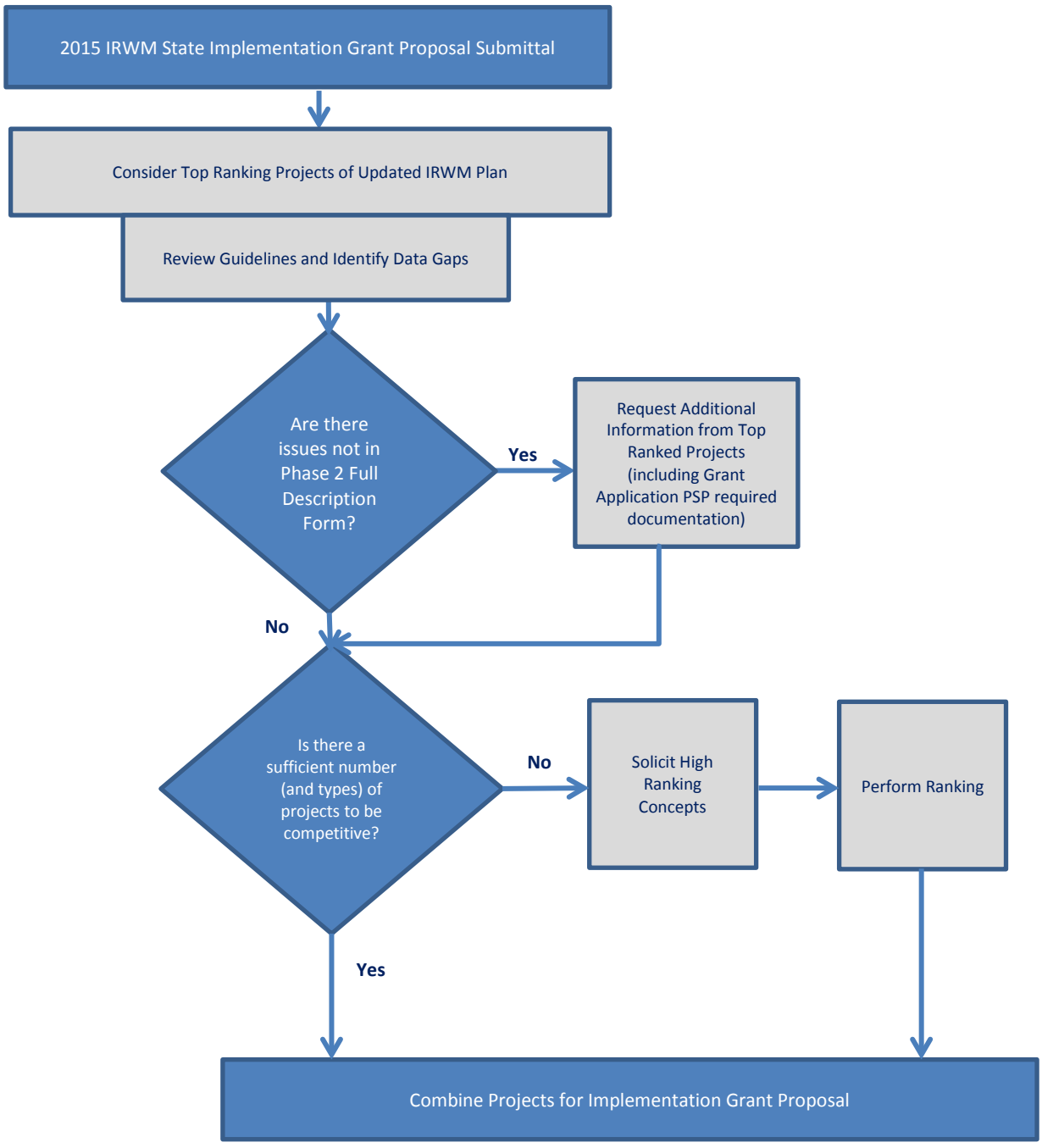
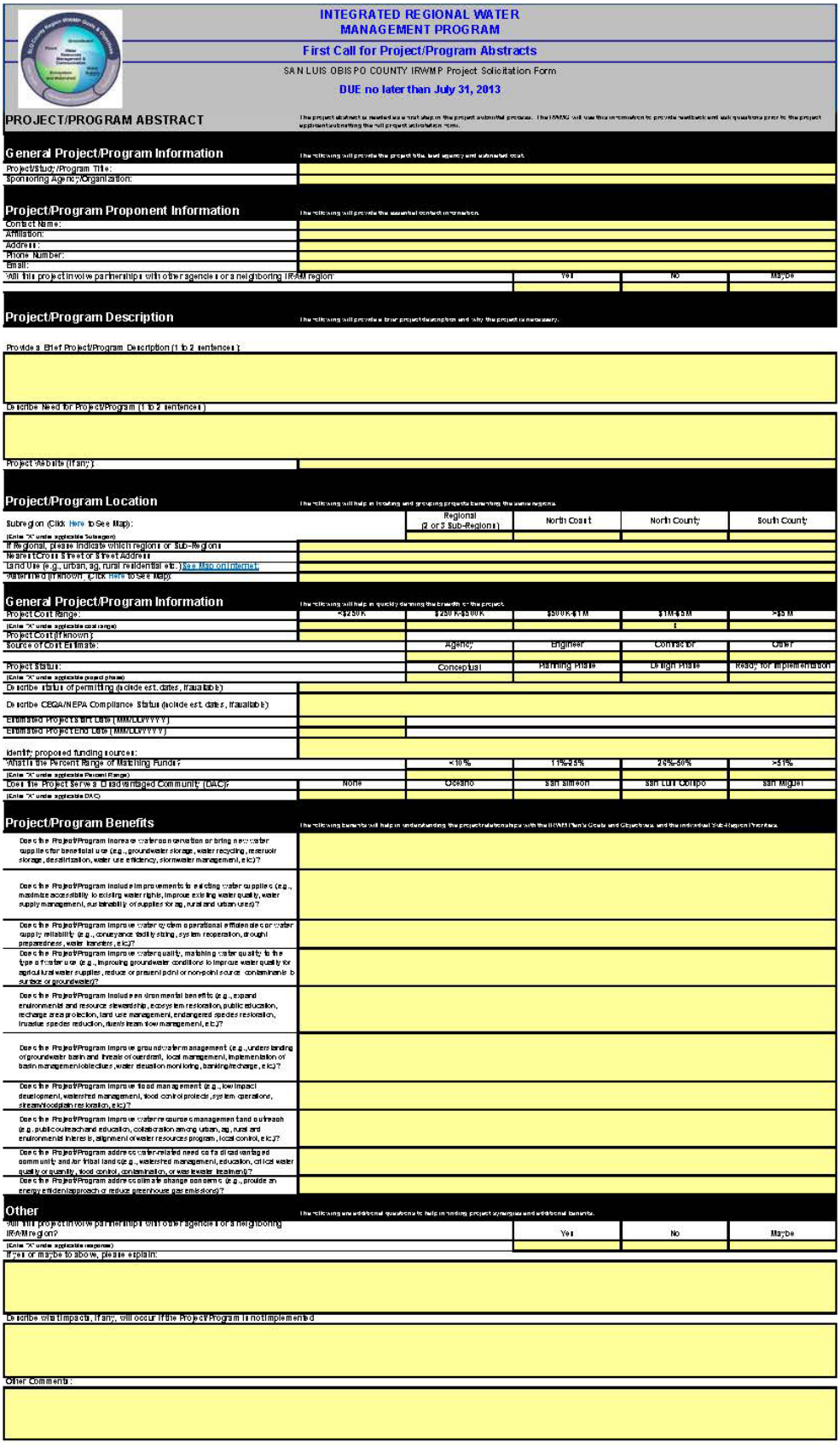


Figure 1-3. Project Update for Grant Process (Flowchart 2)

Attachments

Attachment 1 – Project Abstract Form (Phase 1a)



INTEGRATED REGIONAL WATER MANAGEMENT PROGRAM

First Call for Project/Program Abstracts

SAN LUIS OBISPO COUNTY IRWMP Project Solicitation Form

DUE no later than July 31, 2013

PROJECT/PROGRAM ABSTRACT

The project abstract is essentially a first step in the project submittal process. The IRWMG will use this information to provide feedback and ask questions prior to the project applicant submitting the full project solicitation form.

General Project/Program Information — The following will provide the project title, lead agency and estimated cost.

Project/Study/Program Title:	
Sponsoring Agency/Organization:	

Project/Program Proponent Information — The following will provide the essential contact information.

Contact Name:	
Affiliation:	
Address:	
Phone Number:	
Email:	

Will this project involve partnerships with other agencies or a neighboring IRWM region?	Yes	No	Maybe

Project/Program Description — The following will provide a brief project description and why the project is necessary.

Provide a Brief Project/Program Description (1 to 2 sentences):

Describe Need for Project/Program (1 to 2 sentences):

Project Website (if any):	

Project/Program Location — The following will help in locating and grouping projects benefiting the same regions.

Subregion (Click Here to See Map):	Regional (2 or 3 Sub-Regions)	North Coast	North County	South County
(Enter "X" under applicable Subregion)				
If Regional, please indicate which region or Sub-Regions:				
Nearest Cross Street or Street Address:				
Land Use (e.g., urban, ag, rural residential etc.) (See Map on Internet):				
Watershed (if known) (Click Here to See Map):				

General Project/Program Information — The following will help in quickly defining the breadth of the project.

Project Cost Range:	<$250K	$250K-$500K	$500K-$1M	$1M-$5M	>$5M
(Enter "X" under applicable cost range)					
Project Cost (if known):					
Source of Cost Estimate:		Agency	Engineer	Contractor	Other
Project Status:		Conceptual	Planning Phase	Design Phase	Ready for Implementation
(Enter "X" under applicable project phase)					
Describe status of permitting (include est. dates, if available):					
Describe CEQA/NEPA Compliance Status (include est. dates, if available):					
Estimated Project Start Date (MM/DD/YYYY):					
Estimated Project End Date (MM/DD/YYYY):					
Identify proposed funding sources:					
What is the Percent Range of Matching Funds?		<10%	11%-25%	26%-50%	>51%
(Enter "X" under applicable Percent Range)					
Does the Project Serve a Disadvantaged Community (DAC)?	None	Oceano	San Simeon	San Luis Obispo	San Miguel
(Enter "X" under applicable DAC)					

Project/Program Benefits — The following benefits will help in understanding the project relationships with the IRWM Plan's Goals and Objectives, and the individual Sub-Region Priorities.

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?	
Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?	
Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?	
Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to surface or groundwater)?	
Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reduction, instream flow management, etc.)?	
Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats or constraints, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?	
Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?	
Does the Project/Program improve water resource management (and outreach (e.g., public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?	
Does the Project/Program address water-related needs of a disadvantaged community and/or tribal land (e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?	
Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?	

Other — The following are additional questions to help in ranking project synergies and additional benefits.

Will this project involve partnerships with other agencies or a neighboring IRWM region?	Yes	No	Maybe
(Enter "X" under applicable response)			

If yes or maybe to above, please explain:

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Other Comments:

Attachment 2 – Project Objectives Worksheet (Phase 1b)

Directions (Ctrl-X for interface or):
1. Mark an "X" next to the objectives your project meets.
For any objectives marked, please include a 1-2 sentence description on how the project meets that objective.

SAN LUIS OBISPO COUNTY IRWM Plan Project Objectives Form

Due September 6, 2013

Check Box	Goals and Objectives	Description (1-2 Sentences)
	Water Supply Goal	
	Maintain or improve water supply quantity and quality for potable water, fire protection, ecosystem health, and agricultural production needs. Cooperatively address limitations, vulnerabilities, conjunctive use and water use efficiency.	
	Water Supply Objectives	
	1. Maximize the accessibility to existing and supplemental water supplies in the Region through the utilization of existing infrastructure and development of new infrastructure and agreements.	
	2. Provide adequate and sustainable water supplies and infrastructure to address water deficiencies in all communities, including disadvantaged communities and designated low income census blocks.	
	3. Support sustainable potable water supply programs for rural residents.	
	4. Support sustainable water quality and supply programs for agriculture.	
	5. Support projects aimed to improve existing public water systems to meet State and Federal Drinking Water Quality Standards.	
	6. Develop and implement water management plans in communities of all sizes and water uses consistent with CWC requirements and accounting for environmental water needs.	
	7. Develop and implement conservation programs, measures and practices to increase water use efficiency in all water use sectors in order to maximize water supplies.	
	8. Plan for potential regional impacts of greenhouse gas emissions, climate change and droughts on water quantity and quality.	
	9. Diversify water supply sources, including the use of recycled and desalinized water.	
	10. Support watershed enhancement projects and programs to increase available water supplies to the Region.	
	Ecosystem and Watershed Goal	
	Maintain or improve the health of the Region's watersheds, ecosystems, and natural resources through collaborative and cooperative actions, with a focus on assessment, protection, and restoration/ enhancement of ecosystem and resource needs and vulnerabilities.	
	Ecosystem and Watershed Objectives	
	1. Develop watershed plans or other methods to determine the existing conditions and critical issues of each watershed or water planning area.	
	2. Preserve, enhance, restore and conserve riparian corridors and natural creek and river systems through wetland restoration, natural floodplains, riparian buffers, conservation easements, and other mechanisms to protect water supplies.	
	3. Increase watershed management activities (e.g., education, BMPs, monitoring, etc.) to reduce or prevent point and non-point source discharges of contaminants to surface water and groundwater resources to reduce the potential for developing additional TMDLs.	
	4. Develop public involvement and stewardship programs for public lands and ecosystems.	
	5. Protect and recover threatened, endangered and sensitive species through habitat restoration, stream flow management, and fish passage restoration.	
	6. Reduce impacts of invasive species by removal and/or other management/control methods to promote healthy ecosystems.	
	7. Increase monitoring and promote research programs to obtain a greater understanding of the long-term effects of climate change and greenhouse gas emissions on the region's watersheds and ecosystems.	
	Groundwater Monitoring and Management Goal	
	Achieve sustainable use of the region's water supply within groundwater basins through collaborative and cooperative actions.	
	Groundwater Monitoring and Management Objectives	
	1. Develop groundwater management plans, including salt and nutrient management plans, or other methods to help understand groundwater issues and conditions.	
	2. Improve groundwater management with direct support of locally driven processes, including potential formation of groundwater management structures/ organizations for the purpose of implementing water supply and conservation plans, programs, and projects.	
	3. Develop and implement projects and programs to further basin management objectives of local basin Groundwater Management Plans or other objectives established under other methods used to define groundwater issues and conditions.	
	4. Work with local groundwater governance bodies in the development of the California Statewide Groundwater Elevation Monitoring (CASGEM) Program for groundwater basins in the region where plausible.	
	5. Evaluate and implement groundwater recharge and/or banking programs or efforts to increase the conjunctive use opportunities within the region, where technically feasible and cost-effective.	
	6. Protect and improve groundwater quality from point and non-point source pollution, including geothermal contamination and seawater intrusion.	

Project Objectives Worksheet (Phase 1b), Continued

SAN LUIS OBISPO COUNTY IRWM Plan Project Objectives Form		
Due September 6, 2013		
Check Box	Goals and Objectives	Description (1-2 Sentences)
Flood Management Goal		
Foster an integrated, watershed approach to flood management and improved stormwater quality through collaborative community supported processes in order to ensure community health, safety and to enhance quality of life.		
Flood Management Objectives		
	1. Understand flood management needs per watershed or water planning area.	
	2. Promote the implementation of Low Impact Development projects and practices to reduce storm runoff to protect infrastructure and property from flood damage.	
	3. Integrate stormwater controls, drainage and flood control structures into development projects and/or floodplain restoration to enhance natural groundwater recharge.	
	4. Improve flood control infrastructure and operations and flood management strategies to reduce frequency of downstream flooding, improve water quality, and reduce upstream erosion and downstream sediment accumulation.	
	5. Develop and implement flood management and water storage.	
	6. Develop and implement flood control projects that ensure health and safely and simultaneously protect, restore, and enhance the functions of rivers, creeks, streams, and their floodplains.	
	7. Support the adequate protection of disadvantaged communities from flooding without unfairly burdening communities, neighborhoods, or individuals.	
Water Resources Management and Communications Goal		
Promote open communications and regional cooperation in the protection and management of water resources, including education and outreach related to water resources conditions, conservation/ water use efficiency, water rights, water allocations, and other regional water resource management efforts.		
Water Resources Management and Communications Objectives		
	1. Provide consistent, consolidated and informative public outreach on the coordination of IRWM implementation projects and water resources programs.	
	2. Seek funding for IRWM implementation without unfairly burdening communities, neighborhoods or individuals.	
	3. Actively support and promote local control in addressing water resource issues through establishing stakeholder groups, working with local groundwater governance bodies, and partnering with governance bodies, and partnering with cities, community services districts and other water purveyors when possible.	
	4. Consider property owner rights, existing water supplies and cultural values in the planning and implementation of IRWM projects and programs.	
	5. Support efforts by the State, local agencies, water purveyors and local groundwater governance bodies to align efforts to protect and manage water resources.	
	6. Seek opportunities for water management collaboration between urban, rural, and agricultural interests.	
	7. Provide support and promote education for the participation of disadvantaged communities in the development, implementation, monitoring, and long-term maintenance of water resource management projects.	
	8. Promote public education programs for groundwater management, watershed protection, conservation, flood management, and water quality.	

Attachment 3 – Project Description "Long Form" (Phase 2)

INTEGRATED REGIONAL WATER MANAGEMENT PROGRAM

First Call for Project Abstracts

SAN LUIS OBISPO COUNTY IRWMP Project Solicitation Form

DUE no later than November __, 2013

PART 1 - PROJECT OVERVIEW: Project Overview provides the essential contact information and project description.

General Project Information				
Project Title:				
Project Location:				
Sponsoring Agency/Organization:				
Subregion		North Coast	County	South County
(Enter "X" under applicable Subregion)				
Estimated Cost:	$0			
Project Website (if any):				

Project Proponent Information	*The following requests the Project Sponsor's contact information.*
Contact Name:	
Affiliation:	
Address:	
Phone Number:	
Email:	

Other participating agencies/organizations (if applicable):

Is the sponsor of this project in a position to financially assist the community, benefitting from the project but may have limited financial resources, to help develop a collaborative project? If yes, please explain.

Project Description "Long Form" (Phase 2), Continued

INTEGRATED REGIONAL WATER MANAGEMENT PROGRAM

First Call for Project Abstracts

SAN LUIS OBISPO COUNTY IRWMP Project Solicitation Form

DUE no later than November __, 2013

PART 2 - PROJECT TYPE:

Regional Project Category		
Is the project an element or phase of a regional or larger program?	**Yes**	**No**
(Place an "X" in which applies)		

Project Types (check all project types that apply and provide a brief explanation)	
	Water Supply Availability
	Water System Improvements
	Water Reuse/Recycling/Desalinization
	Water Use Efficiency
	Water Supply Sustainability
	Improved Watershed Understanding
	Reduce Point and Non-Point Contaminants
	Habitat and Endangered Species Protection and Restoration
	Address Climate Change
	Improved Groundwater Basin Understanding
	Groundwater Management
	Implementation of Adopted GMP BMOs
	Improvements to CASGEM Groundwater Monitoring Program
	Groundwater Recharge
	Conjunctive Use and Groundwater Banking
	Flood Management and Protection

Round 2 Implementation Solicitation
File Path: C:\My GEI Work Folder\San Luis Obispo IRWMP\1_SLO IRWM Local\Task 5 Project Ranking Criteria\Full Project Docs\
File Name: ProjSolicForm_Full Version 20130817.xlsm

Project Description "Long Form" (Phase 2), Continued

INTEGRATED REGIONAL WATER MANAGEMENT PROGRAM

First Call for Project Abstracts

SAN LUIS OBISPO COUNTY IRWMP Project Solicitation Form

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PART 2 - PROJECT TYPE:

	Low Impact Development
	Flood Control and Operations
	Public Education and Outreach
	Collaboration Between Urban, Rural, and Ag
	Water Rights Protection
	Related to a Disadvantaged Community
	Related to a Native American Tribe

If this is a conservation effort, does it address long-term drought preparedness by contributing to sustainable water supply and reliability?

How does this project effectively integrate water management with land use planning?

Are you aware of other projects in the same area of benefit with the same goals as you? If so, have you coordinated/ collaborated with the project owners?

Does this project directly incorporate and implement low impact development (LID) design features, techniques, and practices to reduce or eliminate stormwater runoff?

Project Description "Long Form" (Phase 2), Continued

INTEGRATED REGIONAL WATER MANAGEMENT PROGRAM

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PART 3 - DETAILED PROJECT INFORMATION: This worksheet collects detailed project information to understand its compatibility with the IRWM Plan. It covers information such as a full description, community needs, physical benefits, etc.

Project Description The following will provide the detailed project description. Any supporting data should be included as part of this Project Solication.

Please provide a full description of your project and its purpose. Include what will be constructed and/or implemented, and how the project will function.

What are the area(s) and/or entities that will be affected by or will benefit from the project.

Describe how this project meets the interests and mission of the implementing entity(ies).

Are there any potential obstacles to project implementation?

Other?

Project Need(s) Check applicable physical benefits and describe numerical goal(s) and monitoring program(s).

Please describe the most prominent need(s) or problem(s) that the project will address.

As applicable, discuss the need as it relates to the benefit category(ies) selected in the Project Abstract under Project Benefits. (e.g., increased water supply need, water system improvement need, environment benefit need, etc.).

Physical Benefits Physical benefits are quantitative benefits stemming from project implementation which can be monitored over time. Please provide brief explanation to those that apply.

	Water Quality Benefits (e.g., quantifiable improvements to water quality)
	Water Supply Benefits (e.g., quantifiable increase in water supply or improved water quality for ag, urban and rural uses)
	Water Use Efficiency (e.g., quantifiable decreases in water demand for any or all water use sectors)
	Water Reliability (e.g., quantifiable improvements in the availability of water in differing hydrologic conditions)

Project Description "Long Form" (Phase 2), Continued

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PART 3 - DETAILED PROJECT INFORMATION: This worksheet collects detailed project information to understand its compatibility with the IRWM Plan. It covers information such as a full description, community needs, physical benefits, etc.

	Groundwater Management (e.g., quantifiable improvements in groundwater elevations or quality)
	Reduce Point and Non-Point Contaminants (e.g., quantifiable decrease in mass loading of nitrates to small watersheds)
	Endangered Species Protection (e.g., quantifiable improvements in population and mortality rates of certain wildlife species)
	Reduced CO2 emissions (e.g., quantifiable decrease in the mass loading of CO2 emitted to the environment)
	Community/Social Benefits (e.g., number of people every year who visit the project and benefit from its existence)
	Reduced Energy Benefits (e.g., quantifiable reduction in annual energy use)
	Other (e.g., other quantifiable benefits not listed above)

Regional Distribution of Benefits The following will provide how well the project distributes benefits amongst the critical needs in the region and approaches the IRWM Plan hollistically.

Does the project provide specific benefits to disadvantaged communities (DACs) and/or Native American tribal communities? If so, explain. Include how you would approach quantifying/demonstrating the degree of benefit.

Does the project distribute the benefits fairly over the region influenced by its implementation? If not, explain. Include how you would approach quantifying/demonstrating the degree of benefit to differing regions.

Discuss how the project addresses any known environmental justice issues (i.e., implementation of environmental laws, regulations, and policies)?

Does the project help to resolve water resources conflicts in the region (i.e., conflicts concerning water-rights, non-point pollution, TMDLs, etc.)?

Does the project increase awareness (e.g., education, outreach, forums, etc.) or personal contact (e.g., recreation, self-guided trails, etc.) with water resources issues within the benefited region? If so, please explain how the project will be introduced to the public including the expected benefit.

Project Description "Long Form" (Phase 2), Continued

INTEGRATED REGIONAL WATER MANAGEMENT PROGRAM

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PART 3 - DETAILED PROJECT INFORMATION: This worksheet collects detailed project information to understand its compatibility with the IRWM Plan. It covers information such as a full description, community needs, physical benefits, etc.

Technical Feasibility The following is critical to making a determination of feasibility by showing how well the project adheres to the objective or goal. Applicants should provide technical justification for the proposed projects claimed physical benefits. Regardless of the magnitude of

Discuss how the project was selected as the preferred alternative over other projects.

Describe alternative projects and the pros and cons with each.

Describe how this project is (or can be) integrated with other projects, creating synergistic regional benefits.

List all major project milestones (e.g., CEQA compliance, design, financial support, etc.) for the project, and the status of each (Note: Incomplete - Anticipated Completion Date, Percentage of Completion, or Completion)

To what degree is the project dependent on Proposition 84 grant funding? Describe how this project might be implemented if IRWM funding was not awarded in 2015.

Describe project impacts as defined by CEQA (note: if CEQA compliance has not been done, state your opinion of impacts), and the degree to which each impact will be mitigated.

Project Cost The following summarizes known costs and econ studies (if estimates are available, please include copy as part of this workbook)

Total Estimated Capital Cost		
Total Estimated Project Labor Costs		
Estimated Project Life Cycle (Project Life)		
Annual Project O&M Cost		
Cost Basis (Year)		
Project has annual O&M cost after the construction?	**Yes**	**No**
(Enter "X" under applicable response)		
Will the O&M cost be paid by the benefiting rate payers?	**Yes**	**No**
(Enter "X" under applicable response)		
Will the O&M cost be a new rate (or fee) or an increase to existing rate (or fee)?	**Yes**	**No**
(Enter "X" under applicable response)		
Have alternative methods been considered? What are the potential monetary savings for selecting one project over the other? For cost-effectiveness, applicants should first consider alternative ways or methods for achieving the same physical benefits as the proposed project.		
Explain how the project will reduce or minimize energy costs.		
Source(s) of Funding for Capital Cost		
Source(s) of Funding for O&M Cost		
If available, please provide the cost estimate as an attachment to the e-mail correspondence.	**Yes**	**No**
(Enter "X" under applicable response)		

Eligibility Criteria Per DWR requirements, all projects must show compliance with the following documents, if applicable.

Eligibility Criteria (check all that apply to this project).

	Groundwater Management Plan

Project Description "Long Form" (Phase 2), Continued

INTEGRATED REGIONAL WATER MANAGEMENT PROGRAM

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PART 3 - DETAILED PROJECT INFORMATION:

This worksheet collects detailed project information to understand its compatibility with the IRWM Plan. It covers information such as a full description, community needs, physical benefits, etc.

	Urban Water Management Plan
	Water Meter Requirements
	Groundwater Monitoring Requirements
	AB 1420 Compliance
	BMP Compliance
	CEQA Compliance

Project Readiness

Proposed Project Start Date:	
Anticipated Construction Start Date:	
Anticipated Project Completion Date:	

Please indicate the status (pending [0% complete], in process, complete) of the following:

Project Element	Status	% Complete	Estimated Completion Date
Feasibility Study			
Preliminary design			
Land Acquisition/ Easements			
CEQA/NEPA			
Permit Acquisition			
Construction Documents			
Funding			
Readiness to Proceed (w/ construction)			

NOTE: Provide documentation for status of "in process" or "complete".

Economic Feasibility

Is the project considered to be the least cost alternative?	Yes	No
(Enter "X" under applicable response)		
Has a benefit:cost or cost effectiveness analysis been completed for your project?	Yes	No
(Enter "X" under applicable response)		

If yes, please cite reference and briefly summarize. If no analysis has been completed, briefly describe how you would approach conducting such an analysis.

If known, please provide the Benefit:Cost Ratio.	

If the benefits of the project cannot be monetized, explain why. Include whether the benefits can still be described and quantified.

Other project information that merits consideration:

Project Description "Long Form" (Phase 2), Continued

INTEGRATED REGIONAL WATER MANAGEMENT PROGRAM

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PART 4 - Statewide/ IRWM/ Califor This section lists the categories of projects

1	**Statewide Priorities (Put "X" in front of all that the project addresses)**
	Drought Preparedness
	Use and Reuse Water More Efficiently
	Climate Change Response Actions
	Expand Environmental Stewardship
	Practice Integrated Flood Management
	Protect Surface Water and Groundwater Quality
	Improve Tribal Water and Natural Resources
	Ensure Equitable Distribution of Benefits
2	**California Water Plan Resource Management Strategies (Put "X" in front of all that apply). (Please see page 42 of Proposition 84 and Proposition 1E Draft Guidelines dated August 2012.)**
	Reduce Water Demand
	Improve Operational Efficiency and Transfers
	Increase Water Supply
	Improve Water Quality
	Practice Resources Stewardship
	Improve Flood Management
	Other Strategies (Please Describe):
(other strategies includes crop idling for water transfers, dewvaporation, fog collection, irrigated land retirement, rainfed ag and transoceanic water bags)	
3	**Multiple Benefits (Put "X" in front of all that apply – at least one must be checked)**
	Water supply reliability, water conservation and water use efficiency
	Stormwater capture, storage, clean-up, treatment, and management
	Removal of invasive non-native species
	Creation and enhancement of wetlands
	Acquisition, protection, and restoration of open space
	Protection and restoration of watershed lands
	Non-point source pollution reduction, management and monitoring
4	**Multiple Benefits (cont'd) (Put "X" in front of all that apply – at least one must be checked)**
	Groundwater recharge and management projects
	Contaminant and salt removal through treatment technologies
	Conveyance of reclaimed water for distribution to users
	Water banking, exchange, reclamation and improvement of water quality
	Planning and implementation of multipurpose flood management programs

Project Description "Long Form" (Phase 2), Continued

INTEGRATED REGIONAL WATER MANAGEMENT PROGRAM

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DUE no later than November __, 2013

PART 4 - Statewide/ IRWM/ Califor This section lists the categories of projects

	Watershed protection and management
	Drinking water treatment and distribution
	Ecosystem and fisheries restoration and protection
	Reduced Reliance on the Bay-Delta
5	**Exceptions to above (if none are checked):**
	Projects that directly address a critical water quality or supply issue in a DAC
	Urban water suppliers implementing certain BMPs as on page 17 of Guidelines

Project Description "Long Form" (Phase 2), Continued

INTEGRATED REGIONAL WATER MANAGEMENT PROGRAM

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PART 5 - CLIMATE CHANGE: Climate Change (Put "X" in front of all those that indicate to what extent the project contributes to climate change response actions)

a.	
	Increases Water Supply Reliability
	Advances/ Expands Conjunctive Management of Multiple Water Supply Sources
	Increases Water Use and/or Reuse Efficiency
	Provides Additional Water Supply
	Promotes Water Quality Protection
	Reduces Water Demand
	Advances/Expands Water Recycling
	Promotes Urban Runoff Reuse
	Addresses Sea Level Rise
	Addresses other Anticipated Climate Change Impact (e.g. through water management system modifications)
	Other (Please Describe):
b.	Ecosystem and habitat improvements by Reducing Greenhouse Gas Emissions and/or Energy Consumption (Put "X" in front of all that the project addresses)
	Improves Flood Control (e.g. through wetlands restoration, management, protection)
	Establishes Migration Corridors
	Re-establishes River-Floodplain Hydrologic Continuity
	Re-introduces Anadromous Fish Populations to Upper Watersheds
	Enhances and Protects Upper Watershed Forests and Meadow Systems
c.	Mitigation by Reducing Greenhouse Gas Emissions and/or Energy Consumption (Put "X" in front of all that the project addresses)
	Increases Water Use Efficiency or Promotes Energy-Efficient Water Demand Reduction
	Improves Water System Energy Efficiency
	Advances/Expands Water Recycling
	Promotes Urban Runoff Reuse
	Promotes Use of Renewable Energy Sources
	Contributes to Carbon Sequestration (e.g. through vegetation growth)
	Other (Please Describe):

Does the proposed project reduce regional greenhouse gas emissions and/or improve energy efficiency? If so, explain ho

Attachment 4 – Project Abstract Scoring Sheet (Phase 1a)

Phase 1a: Project Abstract Solicitation (Includes all Concepts, Projects and Programs)		Source Document: Abstract Worksheet	Project or Concept:	Project
Is it IRWM related? (Pass or Fail)	Place X			
Is it regional? (geographically, or has regional benefit)				
Is it being sponsored or developed by multiple agencies?				
Is it a multi-benefit project or program?				
Is it a project supporting a critical water supply or water quality need within a "DAC" boundary? (note: must serve within the DAC boundary)				
		Pass/Fail	Fail	

Attachment 5 – Goals and Objectives Worksheet Scoring Sheet (Phase 1b)

Phase 1b: Goals and Objectives Scoring (Includes all Projects/Programs that Submitted Goals and Objectives Worksheets)		Source Document: Goals and Objectives Worksheet	
Project Attributes?	Score		
Is there Multi-Agency support or sponsorship?	0		
Is the Concept Regional or Inter-Regional (i.e., includes adjacent IRWM Areas)?	0		
Does the Concept support a DAC?	0		
		Sub-Total	0

Related Goals? (Score 5 if Goal is satisfied)	Score		
Water Supply	0		
Ecosystem and Watershed Restoration	0		
Groundwater Monitoring and Management	0		
Flood Management	0		
Water Resources Management and Communications	0		
		Sub-Total	0

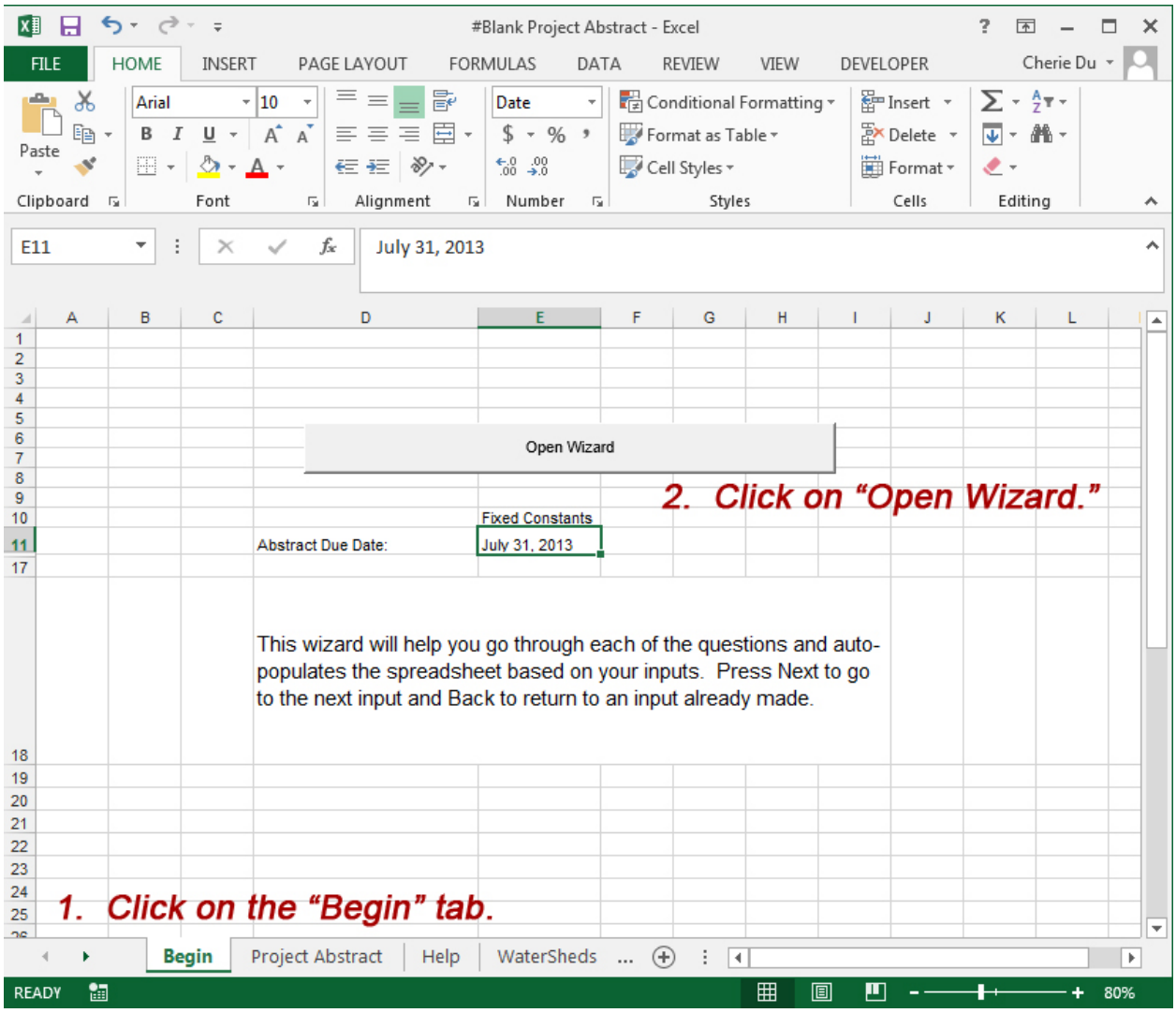
Goals and Objectives Scoring Sheet (Phase 1b), Continued

Related Objectives?		Objective Scoring	Objective Point Worth	Subtotal
Water Supply	1. Maximize Accessibility of Water		20/10 = 2	-
	2. Adequate Water Supply		2.00	
	3. Sustainable Potable Water for Rural			
	4. Sustainable Water for Agriculture			
	5. Water System WQ Improvements			
	6. Implement Water Management Plans			
	7. Conservation/Water Use Efficiency			
	8. Plan for Vulnerabilities of Water Supplies			
	9. Diverse Supply (Recycled, Desalination)			
	10. Support watershed enhancement			
Ecosystem and Watershed Restoration	1. Understand Watershed Needs		20/7 = 2.86	-
	2. Conserve Balance of Ecosystem		2.86	
	3. Reduce Contaminants			
	4. Public Involvement and Stewardship			
	5. Protect Endangered Species			
	6. Reduce Impacts of Invasive Species			
	7. Climate Change on Ecosystems			
Groundwater Monitoring and Management	1. Understand GW Issues and Conditions		20/6 = 3.33	-
	2. Support Local GW Management		3.33	
	3. Further Local Basin Management Objectives			
	4. CASGEM Program			
	5. Groundwater Recharge/ Banking			
	6. Protect and Improve GW Quality			
Flood Management	1. Understand Flood Management Needs		20/7 = 2.86	-
	2. Promote Low Impact Development		2.86	
	3. Enhance Natural Recharge			
	4. Improve Infrastructure and Operations			
	5. Implement Multiple Benefit Projects			
	6. Restore Streams, Rivers and Floodplains			
	7. Support DAC Flood Protection			
Water Resources Management and Communications	1. Public Outreach on IRWM Implementation		20/8 = 2.5	-
	2. Funding for IRWM Implementation		2.50	
	3. Support Local Control			
	4. Consider Property Owner Rights			
	5. Agency Alignment on Water Resources Efforts			
	6. Collaboration Between Urban, Rural, and Ag			
	7. DAC Support and Education			
	8. Promote Public Education Programs			
			Sub-Total	-

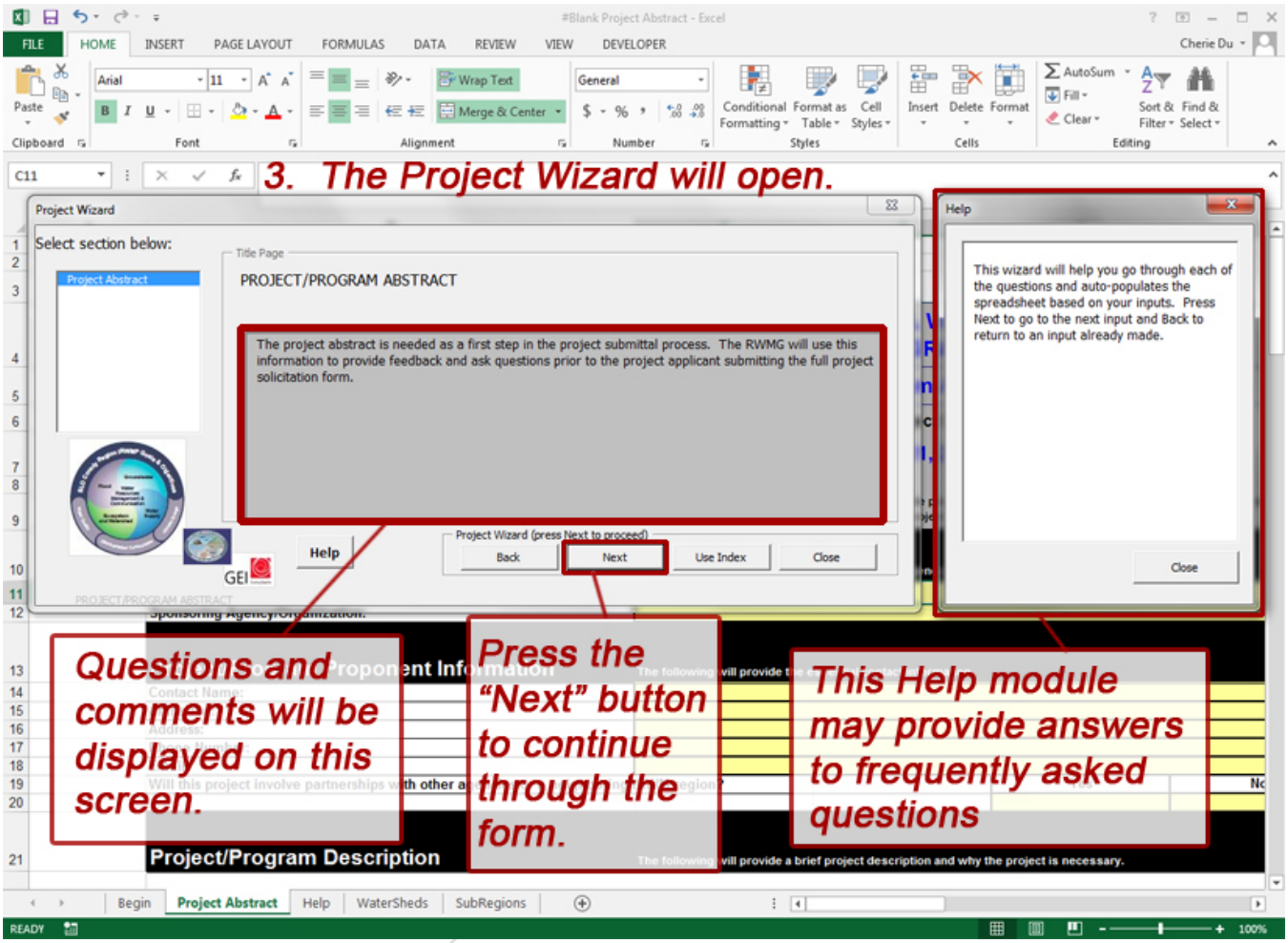
Goals and Objectives Scoring Sheet (Phase 1b), Continued

Project "Readiness to Proceed" Categorization			Source Documents: Abstract and Goals and Objectives Worksheet		
If Yes...			Score		
1. Timeliness	Do project partners have the ability to act quickly to implement the project or program without the need for new agreements or additional funding?				
	5	Immediate, < 1 Year.	0		
	3	Near Term, 1 - 3 Years to develop.			
	1	Mid-term, 3 - 6 Years to develop.			
	0	Long-term, > 6 Years to develop.			
2. Technical Feasibility of Project	Does the project have technical documentation to evaluate the technical feasibility of the project?				
	5	Provides detailed documentation, including reconnaissance, and feasibility studies and completed engineering designs.	0		
	3	Shows to be partially documented, and has reconnaissance, and/or feasibility studies, but incomplete or partial designs.			
	0	The project is not well documented, does not have reconnaissance, and/or feasibility studies and has not been designed.			
3. Environmental Compliance	Does the project have environmental documentation and clearance?				
	5	Existing studies and completed environmental documents.	0		
	3	Some studies or plans to complete studies; a clear plan to complete environmental documentation			
	0	There are no studies or completed environmental documentation.			
4. Permitting	Does the project have permits or a plan to obtain permits?				
	5	The permits have been obtained or are in the process.	0		
	3	The permit requirements are known and there is a plan and schedule in place.			
	0	The permit requirements are not known and there is no plan or schedule.			
5. Funding	Are the project funding sources well defined?				
	5	Financial plan and commitments are well defined; clear resource commitments to maintenance and operations.	0		
	3	Financial plan under development; requires rate payer and/or funding agency approval; no defined resource commitments to maintenance and operations.			
	0	No financial plan and commitments established; no resources defined for maintenance and operations.			
		Sub-Total	0	"Readiness to Proceed" Categorization	Not Ready

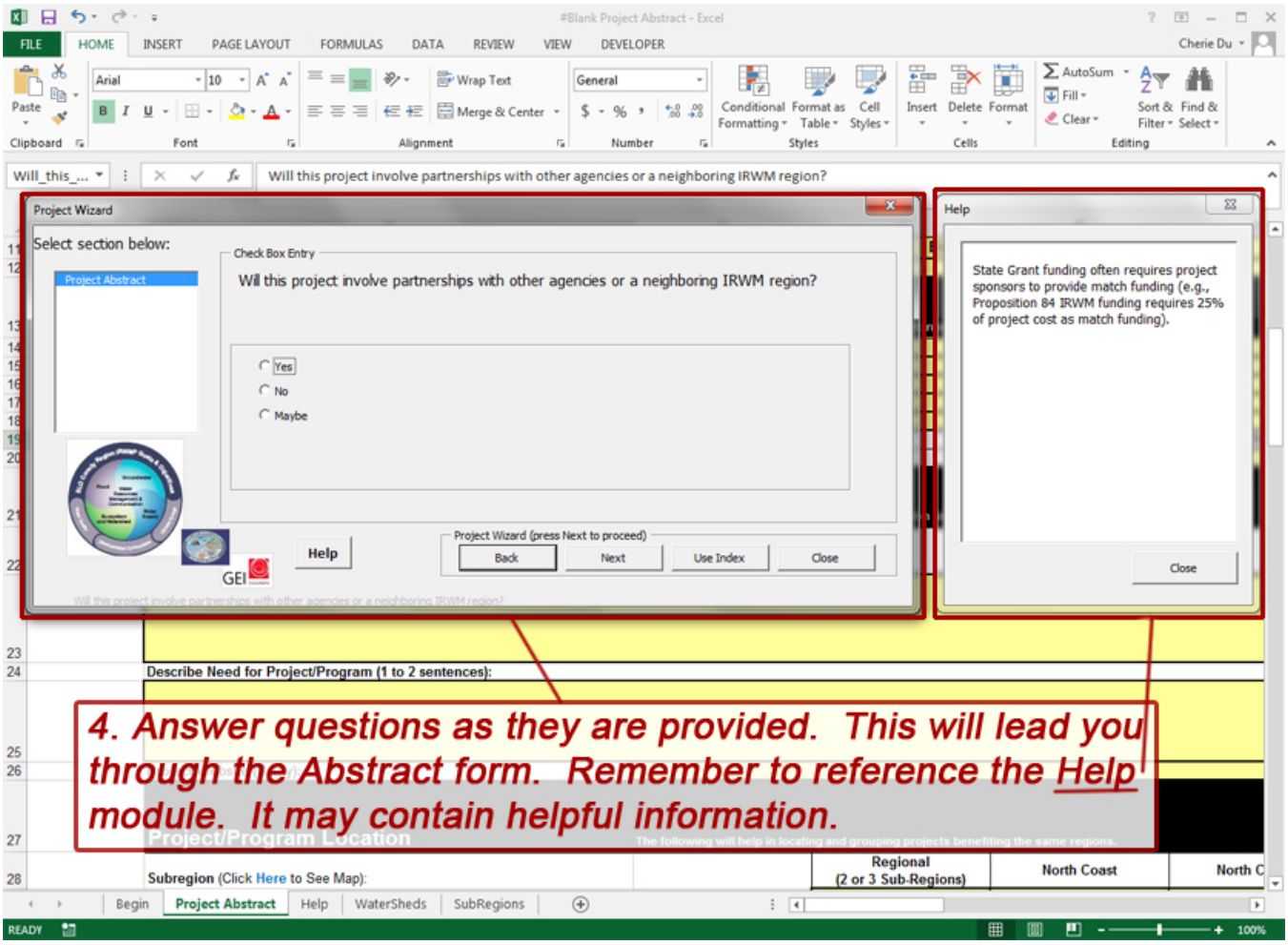
Attachment 6 – Abstract Wizard Tutorial



Abstract Wizard Tutorial, Continued

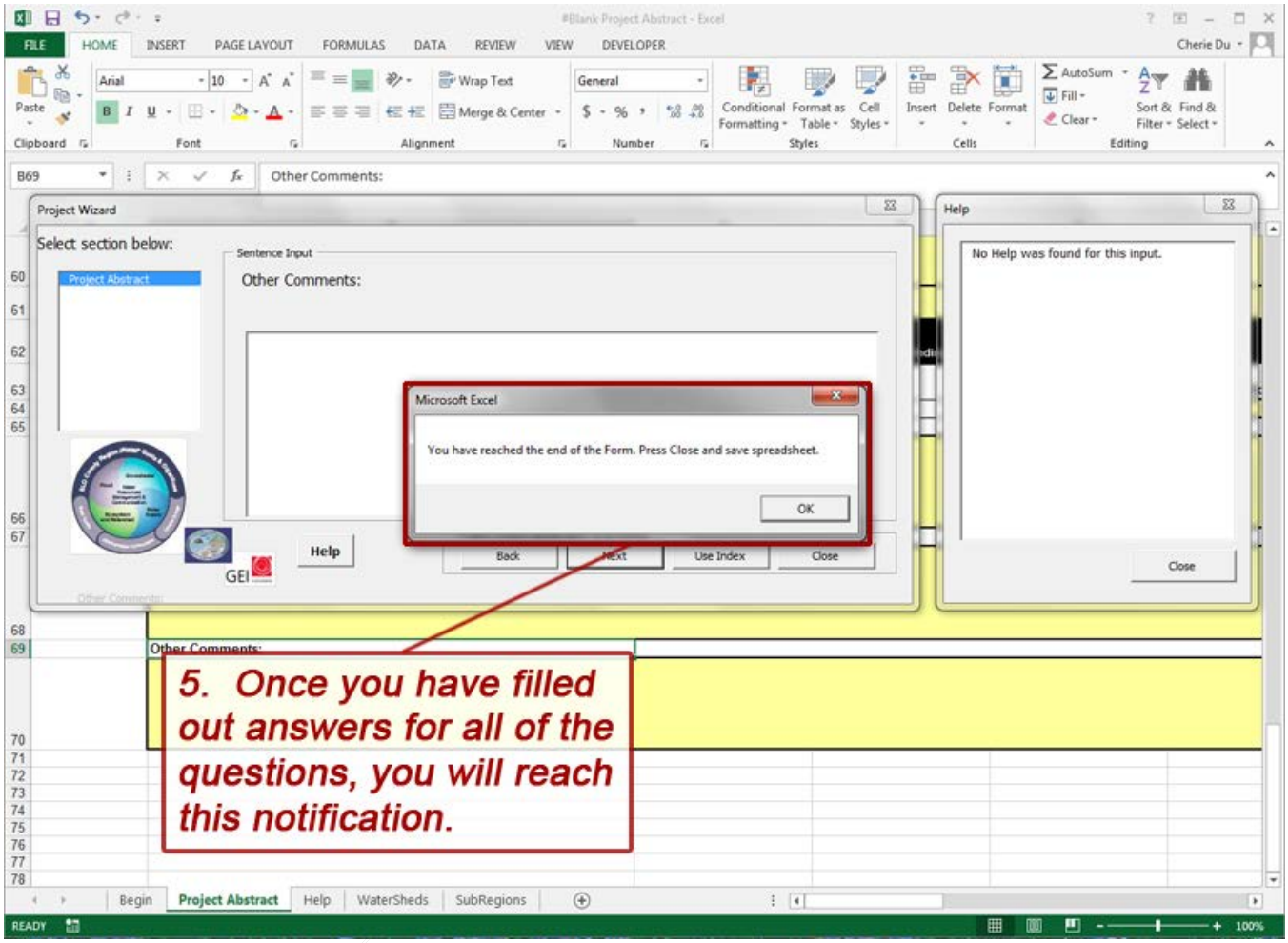


Abstract Wizard Tutorial, Continued



Abstract Wizard Tutorial, Continued

Now your form is completed! Please close the Project Wizard, review your information, and make any changes if necessary. Please be sure to save your document before exiting the application.



Attachment 7 – Helpful Information to Questions Asked on the Abstract Solicitation Form

Help is provided in the Project Wizard to assist users in answering certain questions or prompts in the Project Abstract form. For reference, the following questions or prompts and their help information have been extracted from the Wizard and provided on the table below.

Question/ Prompt	Help
Will this project involve partnerships with other agencies or a neighboring IRWM region?	State Grant funding often requires project sponsors to provide match funding (e.g., Proposition 84 IRWM funding requires 25% of project cost as match funding).
Source of Cost Estimate:	Identify who made the project cost estimate.
Project Status:	**Conceptual** A project/program concept has been formed in a public process but has not progressed beyond the idea stage. **Planning Phase** A project/program which has moved beyond conceptual with engineering and environmental feasibility studies completed. **Design Phase** A project/program which has been screened out as the preferred alternative on the basis of cost, environmental impacts, and level of benefit and has progressed into design. **Ready for Implementation** A project ready to go out for bid with a finished set of design plans, all permitting acquired and has approved CEQA/ NEPA certification.
Does the Project Serve a Disadvantaged Community (DAC)?	A DAC is defined by DWR as follows: "For the purposes of Proposition 84 funding, the PRC §75005.(g) defined a DAC as "a community with a median household income (MHI) less than 80% of the Statewide average."
Project Cost (if known):	Please provide an initial Engineer's Estimate.
Subregion (Click Here to See Map):	Regional refers to a project/program that benefits two or three of the sub-regions.
What is the Percent Range of Matching Funds?	State Grant funding often requires project sponsors to provide match funding (e.g., Proposition 84 IRWM funding requires 25% of project cost as match funding). This will help to indicate the level of certainty that your project/program will be funded.
Identify proposed funding sources:	Please describe the sources of funding currently available to complete the project/program. This can be user rates, state grants, private, etc.
PROJECT/PROGRAM ABSTRACT	This wizard will help you go through each of the questions and auto-populates the spreadsheet based on your inputs. Press Next to go to the next input and Back to return to an input already made.
Subregion (Click Here to See Map):	To view map goto SubRegions worksheet.
Land Use (e.g., urban, ag, rural residential etc.) See Map on internet:	To view map goto form and press on hyperlink.
Watershed (if known) (Click Here to See Map):	To view map goto WaterSheds worksheet.

G-3 Project Abstract Reports

Chorro Creek Ecological Reserve Floodplain Restoration Project

North Coast

Sponsoring Agency/Organization: **Morro Bay National Estuary Program**

Contact Name: **Adrienne Harris**

Affiliation: **Morro Bay National Estuary Program**

Address: **601 Embarcadero, Suite 11_ Morro Bay, CA 93442** Phone Number: **(805)772-3834**

Email: **aharris@mbnep.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The Chorro Creek Floodplain Restoration Project will re-establish Chorro Creek's historic floodplains and restore riparian vegetation to: (1) capture sediment to prevent rapid filling of the Morro Bay Estuary downstream and (2) create valuable habitat for state and federally listed species, specifically threatened Steelhead Trout and (3) help protect water quality.

Describe Need for Project/Program (1 to 2 sentences):

The Morro Bay estuary, one of the most ecologically significant wetlands on the Central Coast of California, is filling with sediment at an alarming and unnatural rate. The Chorro Creek Ecological Reserve Floodplain Restoration Project will restore Chorro Creeks historic floodplains which once captured sediment that is now filling the estuary. Restoring floodplains on the reserve will aid in groundwater recharge.

Project Website (if any):

n_a

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **HWY 1 x Tomasini Rd.**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **agriculture_protected area**

Watershed (if known) See Map: **Morro Bay**

Project Cost Range: **>$5M**

Project Cost (if known): **$5,465,525**

Source of Cost Estimate: **Engineer**

Project Status: **Ready for Implementation**

Describe status of permitting: **unsecured**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

CEQA Mitigated Neg Dec (expired)

Estimated ProjectStart Date: **1/1/2015**

Estimated ProjectEnd Date: **1/1/2018**

Identify proposed funding sources: **Wildlife Conservation Board, CA Department of Fish & Wildlife, CA Coastal Conservancy, Morro Bay National Estuary Program, NOAA Restoration Center**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

The Chorro Creek Ecological Reserve Floodplain Restoration Project will restore historic floodplains on Chorro Creek. This will provide numerous benefits including: reduced stormwater as excess creek flows will spread out over floodplains_ reduced velocity over floodplains will allow sediment to settle out improving water quality_ as water spreads out and slows down water infiltration will increase, recharging groundwater_ restored floodplains will provide valuable habitat for fish and wildlife including ones that are rare and endangered_ the economically and ecologically significant Morro Bay estuary downstream will benefit from reduced sediment which is currently filling in the bay.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Groundwater recharge provided by restored floodplains will benefit both agriculture and City municipalities who rely on wells directly downstream.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Water withdrawals by the City of Morro Bay are contingent on mainting minimum surface flows in Chorro Creek. They are not allowed to pump when surface flows are below 1.4 cfs. Restoring floodplains will increase water infiltration to help recharge groundwater tables and incresae water avaiable as surface flow. Part of this project that has already been implemented was the fee title acquisition of this 560 acre property eliminting it's historic use as irrigated agriculture allowing more water to be avaiable for the creek and downstream users.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Currently the Morro Bay watershed is a 303d listed watershed impaired by sediment. Restoring floodplains in Chorro Creek is called out as a specific action in the Morro Bay TMDL (Total Maximum Daily

Load) Report for Sediment.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Two federal and state listed species are known to occur on the Chorro Creek Ecological Reserve and are benefited by this project: Federal Southern steelhead (Oncorhynchus mykiss irideus) and California red-legged frog (Rana aurora draytonii).

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Restoring floodplains improves groundwater recharge.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

This stream_floodplain restoration project will provide a buffer against stormwater flows for residents and ecosystems downstream.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

N_A

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Morro Bay is not listed as a disadvantaged community.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Restoring floodplains is considered a priority action to help Morro Bay build resilience for predicted increased stormflows. This is specifically identified under Strategy 5: Enhance and Sustain Ecosystems, in 'Managing an Uncertain Future_ Climate Change Adaptation Strategies for California's Water', prepared by the State of California Department of Water Resources in October 2008.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Numerous agencies and organization committed significant resources to help purchase this property with the specific intent to do a large scale floodplain restoration on the property. These partners include: Trust for Public Land, Wildlife Conservation Board, US Fish and WIldlife Service, California Department of Transportation, California State Coastal Conservancy, California Department of Fish and Wildlife and the

Sierra Club - Santa Lucia Chapter. All of these partners are committed to seeing this project implemented.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

There is an immediate need to implement this project to address an avulsion channel that is forming on the site. This avulsion channel is a secondary channel to the creek mainstem that has the potential to become a significant erosion source if Chorro Creek 'adopts' this as the main channel during the next large storm events. In addition, accelerated erosion in the watershed is causing the Morro Bay estuary to fill in much more rapidly than should naturally occur. If current sediment rates continue, it has been projected that Morro Bay will lose all open water to filling within 400 yrs.

Other Comments:

N_A

Conservation Planning for Coastal Watersheds

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **Coastal San Luis Resource Conservation District**

Contact Name: **Nicole Smith**

Affiliation: **Conservation Programs Manager**

Address: **645 Main St., Suite F, Morro Bay, CA 93442** Phone Number: **805-772-4391**

Email: **nsmith@coastalrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The Conservation Plan will identify and prioritize planning and implementation projects on agricultural and rural lands that address non point source pollutants and the loss of riparian corridors. Proposed plans will integrate one or more agricultural best management practices such as irrigation efficiency, nutrient and pest management, salt management, storm water and tail water management, floodplain sediment capture, riparian corridor and wildlife habitat enhancement, and water supply development. The separately proposed Ag Water Management Project could be a component of this project or a stand alone project.

Describe Need for Project/Program (1 to 2 sentences):

Over half of the County's watersheds are dominated by agricultural and rural residential land uses. Agricultural lands are identified as one source of non point source pollutants negatively affecting localcreeks by the RWQCB and their list of 303(d) impaired water bodies.

Project Website (if any):

nsmith@coastalrcd.org

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions: **North Coast, South County**

Nearest Cross Street or Street Address: **N_A**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Agricultural properties in coastal San Luis Obispo County**

Watershed (if known) See Map: **Morro Creek, Morro Bay, San Luis Obispo Creek, Pismo Creek, Arroyo Grande Creek, Nipomo Creek, Oso Flaco Creek**

Project Cost Range: **$250K-$500K**

Project Cost (if **$500,000**

known):

Source of Cost Estimate: **Agency**

Project Status: **Planning Phase**

Describe status of permitting: **N_A**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

N_A

Estimated ProjectStart Date: **7/6/1905**

Estimated ProjectEnd Date: **7/9/1905**

Identify proposed funding sources: **IRWM, in-kind contributions and potential grant funding. If the project is accepted into the regional grant additional work can be completed to produce a line item budget and estimate contributions. The Plan looks at 7 different watersheds. The District is willing to look at these watersheds individually for a lower cost, if the full project is not competitive.**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Maximize water conservation for rural and agricultural uses_

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

BMPs will efficiently use and reuse water supplies through irrigation efficiency, water supply development, nutrient and pest management, salt management, and tail water management.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

It will plan for water system improvements.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Protect and improve source water quality_ support the development and implementation of TMDLs_ implement the California NPS Plan and the RWQCB Conditional Agricultural Waiver Program for irrigated agriculture.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species

restoration, invasive species reductio

Identify best management practices that will be cost effective to address the waterquality and habitat challenges specific to each coastal watershed._ purchase, preserve, enhance, and restore land in ecologically sensitive ecosystems_ conserve natural resources

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Protect and improve groundwater quality from point and non-point source pollution, including nitrate contamination_ MTBE and other industrial, agricultural, and commercial sources of contamination_ naturally occurring mineralization, boron, radionuclide, geothermal contamination_ and seawater intrusion and salts.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Distinguish the root cause of flooding problems stemming from new development, existing development, and mandatory regulation_ integrate ecosystem enhancement, drainage control, and natural recharge into development projects.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Conduct a multi-media survey to determine agricultural landowner interest in conservation planning and their needs in terms of training and resources to meet regulatory mandates like the proposed Agricultural Order_ conduct at least two (2) water quality short courses with support from NRCS_ one focused on irrigated agriculture and one on rangeland. Workshops will aid in identifying landowners willingto implement BMPs

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

We will work with the Natural Resource Conservation Service (NRCS)

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Erosion, inefficient water use, pollution and other conservation issues will continue with varying levels of attention and funding to support best management practices.

Other Comments:

S&T Mutual Water Co_Golden State Water Co Intertie

North Coast

Sponsoring Agency/Organization: **S&T Mutual Water Company**

Contact Name: **William Garfinkel**

Affiliation: **S&T Mutual Water Co**

Address: **P. O. Box 6391, Los Osos CA 93412** Phone Number: **(805)801-3138**

Email: **morrobill@gmail.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Build a potable water intertie between S&T Mutual Water Co. and Golden State for emergency water if a problem occurs on S&T Mutual well #5 or if the well needs to shut down

Describe Need for Project/Program (1 to 2 sentences):

S&T Mutual has no other source of potable water other than what it pumps from #5 well

Project Website (if any):

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions: **Los Osos WPA5**

Nearest Cross Street or Street Address: **Pecho Valley Road**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban**

Watershed (if known) See Map: **Los Osos groundwater basin**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Conceptual**

Describe status of permitting: **Noy yet applied for**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Estimated ProjectStart Date: **7/7/1905**

Estimated ProjectEnd Date: **7/7/1905**

Identify proposed funding sources: **User rates and grants**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes - New water supplies

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes - Sustainability of water supplysupply

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes - Reliability of water transfer

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

No

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

No

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes - Possably to shift pumping in the aquifer to the east

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater

treatment)?

No

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Require cooperation with Golden State Water Co

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If for any reason S&T Mutual cannot pump water from well #5 then the Sunset Terrace neighborhood in Los Osos will be without water

Other Comments:

SLO County Drought Protection & Climate Change Preparedness Pilot Project

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **GREENSPACE - The Cambria Land Trust**

Contact Name: **Rick Hawley**

Affiliation: **Executive Director**

Address: **POB 1505 Cambria, CA 93428-1505** Phone Number: **805-927-2866**

Email: **rick@greenspacecambria.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Develop, establish, and implement a set of hierarchical protocols and standards that will be followed by water users_purveyors during drought situations caused by climate change events and_or other natural or man-made conditions. The primary objective of the project is to protect and provide beneficial uses to humans and aquatic organisms, during drought situations, prior to allocating water for other beneficial uses. The project will initially start with the pilot project watershed of Santa Rosa Creek along the North Coast of SLO County. This watershed will provide a good opportunity to develop and test these drought protection criteria, which can then be scaled up to other watersheds, and eventually the entire County.

Describe Need for Project/Program (1 to 2 sentences):

Most of SLO County, including individual watersheds, are very dependent upon GW for their water supply for domestic potable water, agriculture, industrial, etc. uses. This has put GW elevations, domestic supplies, individual well owners, base flow conditions in streams, and aquatic species at risk and in need of protection. A good example of this issue is the severe problem with the existing Paso Robles GW basin. There is a serious need for resources and funding to implement alternative approaches to groundwater recharge, reuse, and management.

Project Website (if any):

Subregion (See Map) **Regional** **(2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions: **The pilot project will start in the N. Coast subregion, but will eventually be scaled up to include the entire SLO County region.**

Nearest Cross Street or Street Address:

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Agriculture, Rural, Urban**

Watershed (if known) See Map: **North Coast**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Planning Phase**

Describe status of permitting: **no permits are currently envisioned however, as the project design process is completed permits, if any, will be identified at that time**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

CEQA NOE

Estimated ProjectStart Date: **6/1/2014**

Estimated ProjectEnd Date: **12/31/2017**

Identify proposed funding sources: **Greenspace & other partners**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **San Simeon**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

The project will increase water conservation by developing and implementing protocols and standards for water users_purveyors during drought conditions. This will improve groundwater storage, create opportunities for water recycling, and promote better practices in stormwater management with low impact development. Water use efficiency will also be enhanced by prioritizing use and consumption.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

The project will benefit the North Coast water supply and quality with better management, focusing on severe drought conditions induced by climate change. It willl build support for future recycled_greywater systems and rainwater reuse, especially in areas where GW supply is limited and these 'other' water supplies are not currently being used. The project will also establish a model for other watersheds to follow or adapt to in order to create a sustinable supply for ag, rural, and urban use.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Benefits of the project include water supply efficiency by developing drought preparedness for climate change and_or other natural or man-made conditions.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

The project improves water quality by managing water use and consumption for all users, including

reducing and preventing point or non-point source contaminants to surface and groundwater.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

This project will expand environmental and resource stewardship by priortizing water resources (during drought conditions) for aquatic organisms and human consumption. The project will increase public environmental education on the importance of water resource management issues and proper stewardship of groundwater resources.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

The project will help support local management of GW resources and protect against overdraft of GW basins. It will also identify, encourage, and protect GW recharge areas and protect base flow conditions for streams and aquatic resources.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Yes, over time the project will help support the importance and protection of GW recharge areas and the important role LID methods help to increase GW recharge. These improvements will also reduce flooding threats and restore floodplain habitats.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes, it will create public outreach and participation by collaborating urban, ag, rural, and environmental interests with local resource management and communication.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes, the North Coast area includes San Simeon, a disadvantaged community.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

The primary focus of this project is to establish standards and protocols for managing and protecting water resources during drought conditions caused by climate change, or other man-made impacts.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Other partners involved in the project include Central Coast Salmon Enhancement, Cambria Community

Services District, SLO County, San Luis Coastal RCD, and private landowners.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Impacts include overdrafting of GW basins in Santa Rosa Creek and throughout SLO County that threaten domestic and private well water supplies, as well as, base flow in streams for aquatic organisms. These impacts are of greater concern in drought conditions with climate change or other man-made induced conditions.

Other Comments:

Tracking and Conserving Vineyard Irrigation Water in the Paso Robles Groundwater Basin

North County

Sponsoring Agency/Organization: **Vineyard Team**

Contact Name: **Kris Beal, M.S.**

Affiliation: **Vineyard Team, Executive Director**

Address: **5915 El Camino Real, Atascadero, CA 93422** Phone Number: **805-466-2288**

Email: **kris@vineyardteam.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Maybe**

Provide a Brief Project/Program Description (1 to 2 sentences):

This project will create weather based irrigation targets for the vineyard industry, in addition to providing technical assistance to individual growers to help them maximize their irrigation efficiencies. Vineyard Team staff (viticulturist and irrigation specialist) will work with the Irrigation Training and Research Center to develop the targets (refined for subareas of the basin), collect applied water use for individual growers, report the data in aggregate, and feedback to individual growers as a basis for technical assistance.

Describe Need for Project/Program (1 to 2 sentences):

Vineyards currently represent over 50% of the basin pumping demand and must play an important role in protecting the sustainability of the basin. Even small improvements in irrigation efficiencies and decreases in applied water use can produce a meaningful and significant reducation in pumping in the basin.

Project Website (if any):

www.vineyardteam.org

Subregion (See Map) **North County**

If Regional, please indicate which Subregions: **North County**

Nearest Cross Street or Street Address: **n_a**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Agriculture**

Watershed (if known) See Map: **Estrella, Atascadero, Shandon, Creston**

Project Cost Range: **$250K-$500K**

Project Cost (if known): **$350,000**

Source of Cost Estimate: **Other**

Project Status: **Ready for Implementation**

Describe status of permitting: **n_a**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

n_a

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/2/1900**

Identify proposed funding sources: **IWRM & other grant sources, matching funds provided by private industry from membership dollars**

What is the Percent Range of Matching Funds? **26%-50%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes, this project will increase water conservation among vineyards, the largest pumper in the Paso Robles Groundwater Basin

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes, this project will affect the sustainability of groundwater supplies in the Paso Robles Groundwater Basino

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes, reducing groundwater pumping addresses drought preparedness.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes, groundwater conservation affects water quality by reducing concentration of salts within the basin.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes, conservation of groundwater pumping provides an environmental benefit through stewardship and stabilizing groundwater levels.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes, reducing groundwater pumping from ag users is a significant groundwater management objective and

consistent with basin objectives.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes, this project includes an agricultural outreach component - the Vineyard Team's current outreach structure currently reaches over 2,500 growers each year through print and digital materials, field days, and conferences.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes, reducing applied irrigation water from pumping directly reduces energy demands.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Maybe

If yes or maybe, please explain:

We anticipate working with the Upper Salinas Las Tablas RCD to develop outreach activies and materials, in addition to providing irrigation system evaluations for individual growers.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

The Vineyard Team is a small, grass roots grower group with technical capacity and outreach infrastructure to conduct meaningful programs that affect grower behavior. Nevertheless, the group's capacity is limited and requires financial support to implement a robust water conservation program that involves industry wide data collection and grower specific technical assistance. Without financial support, the group is limited in being able to provide targeted programs and many growers will not be assisted in improving their irrigation efficiencies. Not implementing a rigorous program to address vineyard pumping in the Paso Robles Groundwater Basin will have significant negative effects on the basin.

Other Comments:

The Vineyard Team is the best organization to implement a demand management program with vineyard irrigators in the basin. The group has a 15 year track record working with growers and has the respect and credibility in the community. The Vineyard Team has a proven track record for influencing behavioral change on a variety of farming issues and will be successful in the area of water conservation.

21st Street Reservoir Reconstruction

North County

Sponsoring Agency/Organization: **City of Paso Robles**

Contact Name: **Christopher Alakel**

Affiliation: **City of Paso Robles**

Address: **1000 Spring St., Paso Robles, California 93446** Phone Number: **805-237-3861**

Email: **calakel@prcity.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **No**

Provide a Brief Project/Program Description (1 to 2 sentences):

The project involves the reconstruction of an antiquated 4 million gallon capacity in-ground potable water reservoir located on the City's west side.

Describe Need for Project/Program (1 to 2 sentences):

The existing reservoir, constructed in the 1930s and 1950s is not built to modern engineering and seismic standards for water system reservoirs. The reservoir roof is constructed of wood framing and plywood and is in danger of collapse. The roof sustained significant damage during the San Simeon quake of 2003. The structure has been repaired many times in the past but it is in need of replacement. In the event of a tank failure, water supply and emergency water supply for City's west side would be severely compromised.

Project Website (if any):

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **21st Street and Olive St. , Paso Robles, California**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban**

Watershed (if known) See Map: **Salinas**

Project Cost Range: **>$5M**

Project Cost (if known):

Source of Cost Estimate: **Engineer**

Project Status: **Design Phase**

Describe status of permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Pending

Estimated ProjectStart Date: **1/1/2017**

Estimated ProjectEnd Date: **1/1/2018**

Identify proposed funding sources: **Water Rate Revenues**

What is the Percent Range of Matching Funds? **>51%**

Does Project Serve a Disadvantaged Community (DAC)? **Paso Robles**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

The project will provide improvements to existing water supplies, increasing potable water system reliability for the 10,600 + water customers of the City of Paso Robles

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The project will improve water supply reliability within the City of Paso Robles, particularly the low-income west side of the City.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

The new reservoir will provide a modern tank design with improved water mixing. This will improve improve the quality of water delivered to City water customers. The existing antiquated reservoir has limited mixing capability to aid in maintaining chlorine residual and controlling the formation of Trihalomethanes (THM).

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. The project will result in improved quality of wastewater discharged to the Salinas River.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

No.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes. Paso Robles has been designated as a disadvantaged community.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the project is not implemented, the City's west side will continue to be served with a storage reservoir that is at high risk of failure, especially during a seismic event, with the potential for flooding damage, and leaving a large portion of the City with inadequate emergency water storage.

Other Comments:

Several desgin alternatives have been taken to various levels of completion. Final design of a single 4 MG replacement reservoir will be needed.

8th Street Upper Aquifer Well and Nitrate Removal Facility

North Coast

Sponsoring Agency/Organization: **Los Osos Community Services District**

Contact Name: **Margaret Falkner**

Affiliation: **Interim General Manager**

Address: **2122 9th Street, Suite 102, Los Osos, CA 93402** Phone Number: **805-528-9376**

Email: **mfalkner@losososcsd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **No**

Provide a Brief Project/Program Description (1 to 2 sentences):

This project consists of the construction of a new well into the Los Osos Groundwater Basin Upper Aquifer and will include construction of a nitrate removal facility at the Los Osos Community Service District's 8th Street and El Moro water yard site. The new Upper Aquifer well will help reduce stress on the Lower Aquifer, thus reducing the potential for seawater intrusion in the Lower Aquifer, which is the community's primary drinking water supply.

Describe Need for Project/Program (1 to 2 sentences):

The Los Osos Groundwater Basin is in a Level Severity III, and is experiencing seawater intrusion in the community's primary drinking water supply. Without the completion of this project, the Basin safe yield will continue to be in overdraft and the seawater intrusion front will continue to move eastward impacting more of the community's potable water supply wells, resulting in the loss of potable wells, the community's only drinking water supply. The proposed project will increase production of the Upper Aquifer, supplement production in the Lower Aquifer to make up production lost from the District's main water supply, and shift production from the west to the east of the District alleviating seawater intrusion.

Project Website (if any):

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **8th Street and El Moro Avenue, Los Osos, CA**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Residential**

Watershed (if known) See Map: **Los Osos_Morro Bay**

Project Cost Range: **$500K-$1M**

Project Cost (if known): **$935,000**

Source of Cost Estimate: **Engineer**

Project Status: **Design Phase**

Describe status of permitting: **Currently permitting has not been initiated for construction of the well and treatment equipment installation. Once design is completed, we will apply for the appropriate permits.**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

This project will require an update to the previous CEQA determination done for the Los Osos Water Master Plan in 2005. It is expected that the project will include a mitigated Negative Declaration from San Luis Obispo County.

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **LOCSD Water Fund, Grant Funding**

What is the Percent Range of Matching Funds? **<10%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

The project will provide a new water source that will improve reliability of the District's domestic water supply.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

The project will help improve existing water quality by reducing the demand on the Lower Aquifer, thereby reducing the rate of seawater intrusion into the Lower Aquifer of the Los Osos Groundwater Basin. In addition, the new well will include a nitrate removal facility, improving the water quality coming from the groundwater, which will then be blended with the existing water, improving overall water quality in the system.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

This project directly improves water supply reliability by providing an additional water supply source from the Upper Aquifer, thereby reducing the demand on the Lower Aquifer.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

This project will help reduce the rate of seawater intrusion on the Lower Los Osos Groundwater Basin Aquifer, thereby helping improve overall groundwater quality in that Aquifer.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

This project will provide environmental benefits by improving recharge protection of the already-overdraft

Lower Aquifer of the Los Osos Groundwater Basin. Pumping from the Upper Aquifer will provide relief from the Lower Aquifer, slowing seawater intrusion and helping to protect the Lower Aquifer safe yield. In addition, treating the high nitrates from the Upper Aquifer will improve domestic water quality. This project provides an excellent opportunity for public education on the overall resource stweardship of how potable water supply has a direct relationship with environmental aspecs such as seawater intrusion and a limited groundwater source.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

The ISJ Working Group, a court mandated entity, comprised of representatives from LOCSD, SLO County, Golden State Water Company, and S&T Mututal Water Company, are currently preparing a Los Osos Groundwater Basin Management Plan (Basin Plan). Some of the objectives of the Basin Plan are to bring the basin into a safe yield for existing customers. Based on hydogeological studies, this objective can be accomplished by reducing pumping of the lower aquifer, shift production to the Upper Aquifer, and shift major pumping from the west to the east side of the groundwater basin, further away from the source of seawater intrusion. This project meest these objectives and improves overall groundwater management.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

N_A

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

This project meets several water resource management goals, and affects several agencies. The nitrate contamination of the Upper Aquifer has been a well documented issue in the Los Osos Groundwater Basin and, the objectives of this project, including improving water quality by nitrate removal, and pumping from the Upper Aquifer to alleviate seawater intrusion from the Lower Aquifer, will directly and indirectly affect agricultural, urban, rural, and environmental interests, as well as the public.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

N_A

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Seawater intrusion, a potential result of climate change, could severely impact the primary drinking water supply for the District. Implementing this project, thereby reducing the rate at which seawater intrusion impeeds the quality and quantity of the domestic water supply for the District, would help mitigate seawater intrusion associated with climate change.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The ISJ Working Group, a court mandated entity, comprised of representatives from LOCSD, SLO County, Golden State Water Company, and S&T Mutual Water Company, are in the process of preparing a Groundwater Basin Management Plan (Basin Plan). One of the objectives outlined in the Basin Plan is to bring the Los Osos Basin into a safe yield for existing customers. While the project would be implemented and owned soley by the Los Osos Community Services District, the impacts of the project help meet the objective of the Basin Plan, thereby improving the overall drinking water reliability for the water purveyors relying on groundwater from the Los Osos Basin.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

The District receives its entire water supply from the Los Osos Groundwater Basin (Basin). The Basin has two distinct zones: Upper Aquifer and the Lower Aquifer. There are currently two separate, but highly intertwined problems with the Basin. The first issue is that the Lower Aquifer is experiencing increasing levels of seawater intrusion due to overdrafting of the Lower Aquifer. The second issue is that the Upper Aquifer is contaminated with nitrates above the drinking water standard. The Lower Aquifer has been the District's, as well as the other two water purveyors', primary water supply source as the Upper Aquifer has been contaminated by nitrates. The Lower Aquifer is currently in overdraft and is experiencing seawater intrusion in the District's and other water purveyors' westernmost wells. Production from the District's largest and primary water supply, the Palisades Well, has been required to be reduced to minimize the impacts of seawater intrusion. Other wells within the District are being utilized instead of the Palisades Well, all of which have lower production rates, and subsequently the District is barely keeping up with current water demands. Due to the high density of septic systems in the Los Osos Community, the Upper Aquifer is contaminated with nitrates above the drinking water standards. The community has been subject to a building moratorium from the Regional Water Quality Control Board, Resolution 83-13 for the past 28 years. This order requires the community to develop a community wide centralized wastewater collection system and treatment plant, which is currently underway by the County of San Luis Obispo and is anticipated to break ground in 2012. The District, as well as the other two water purveyors within the community have under-utilized the Upper Aquifer because the water quality for nitrates does not meet current CDPH drinking water quality standards. Limited blending to reduce nitrate levels below drinking water standards has occurred in years past, but not to the degree that such blending can augment existing water supply sufficiently. The County of San Luis Obispo, due to the two distinct water quality issues and the overdraft of the Lower Aquifer, has placed the Los Osos Groundwater Basin in a Level Severity III Drought condition. In order for the Los Osos Groundwater Basin to be sustainable, the District must reduce its pumping from the Lower Aquifer and increase its pumping from the Upper Aquifer to meet existing demands. In order to increase production from the Upper Aquifer, the water is required to be treated to remove nitrates to the degree that the water supply meets drinking water standards. The Los Osos Groundwater Basin is in a Level Severity III, as defined by the County of San Luis Obispo. Without the completion of this project and additional projects defined by the ISJ Working Group, the Basin safe yield will continue to be in overdraft and the seawater intrusion front will continue to move easteward impacting more of the community's potable water supply wells, which would result in the loss of potable water wells, the community's only drinking water supply.

Other Comments:

See attached Exhibit 1 for the proposed site plan for the new well and nitrate removal treatment skid. The Project Cost Estimate provided was conservative. The project cost will range from $840,000 - $935,000

Agricultural Water Management and Conservation Program

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **Coastal San Luis Resource Conservation District**

Contact Name: **G.W. Bates**

Affiliation: **Coastal San Luis Resource Conservation District**

Address: **645 Main Street, Suite F, Morro Bay, CA 93442** Phone Number: **805-772-4391**

Email: **gbates@coastalRCD.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

This project is designed to provide education, training, technical support, and capital funding to improve irrigation water management in the County. Funds will be used to teach farmers how to manage water usage and provide the modern tools required to do so. The project will include the following components:

1. **Funding assistance for agricultural water meters and other irrigation system improvements aimed at water use efficiency.**
2. **Coordinate installation of additional CIMIS Stations for improved weather-based irrigation scheduling.**
3. **Development of mobile applications for weather based irrigation scheduling. This would include implementing the CropManage program developed by the UC Cooperative Extension**
4. **Education, outreach and training for farmers on irrigation water management.**
5. **Conducting Irrigation System Evaluations.**

Describe Need for Project/Program (1 to 2 sentences):

Agricultural water use accounts for a large portion of all the water used in the County. Poor agricultural water management impacts groundwater and surface water quantity and quality. Through proper management and use of appropriate technologies farmers can conserve water and make the most of the available supply. In order to achieve this farmers need access to flow meters and weather based irrigation scheduling information as well as training on how to achieve water conservation through irrigation water management. The proposed project can provide all of these to farmers throughout the County.

Project Website (if any):

Subregion (See Map) **Regional** **(2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address:

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Agricultural**

Watershed (if known) See Map: **County Wide**

Project Cost Range: **$250K-$500K**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Conceptual**

Describe status of permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

CEQA_NEPA has not begun. The majority of this project would be exempt form CEQA_NEPA with the possible exception of the construction of new CIMIS stations.

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **USDA_NRCS, Possible Landowner Match**

What is the Percent Range of Matching Funds? **<10%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes. The proposed project will improve agricultural water use efficiency by helping to provide modern tools and methods for irrigation water management.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes. The proposed project will help the county manage groundwater supply and move towards sustainability. Water quality will also benefit.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes. This project will improve operational efficiencies for on farm irrigation systems by helping to provide structural improvements to existing systems. By increasing irrigation water use efficiency the project will also improve drought preparedness for farmers.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes. This project will reduce non-point source contaminants to surface and ground water by reducing excess leaching and runoff from irrigated ag lands.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. The goal of this project is to improve water use efficiencies by increasing the percentage of applied irrigation water that contributes to beneficial use. This will reduce the amount of 'excess' or 'non-beneficial' irrigation water pumped which will reduce the opportunity for pollution, and reduce the amount of polluted runoff entering local ecosystems.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. One of the major difficulties with groundwater management is the lack of metering on irrigated ag land. If groundwater is not accurately measured, then it cannot be adequately managed. This is true on a the basin scale as well as the farm scale. Without proper metering, neither farmers nor monitoring agencies can accurately measure water use. Providing flow meters can improve groundwater management by improving measurement. On-farm flow measurement is also required for proper irrigation water management.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. A major component of this project is education, outreach and training for agricultural water resources management.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes. This project will improve irrigation water management throughout the County. This includes any disadvantaged communities were irrigated agriculture is present. This program will address areas such as the Paso Robles Groundwater Basin with critical quantity issues, and help prevent other basins from reaching critical levels.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes. Improved irrigation efficiencies will reduce energy used for pumping. This in turn will reduce greenhouse gase emissions.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

This project will involve partnerships throughout the County. The Coastal San Luis Resource Conservation district will partner with agencies like the National Resource Conservation Service (NRCS), Upper Salinas - Las Tablas Resource Conservation District and any water districts that supply irrigation water. The UC Cooperative Extension could be another partner.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Failure to implement irrigation water management and conservation efforts will exacerbate county water quality and quantity issues. These issues have reached critical levels in many areas in the County and will continue to grow if unchecked.

Other Comments:

Measurement tools are required to implement irrigation water management. This project can help implement these tools throughout the County and train farmers on their use.

Alternatives Analysis and BMP Implementation Plan for the Oso Flaco Watershed

South County

Sponsoring Agency/Organization: **Coastal San Luis Resource Conservation District**

Contact Name: **Nicole Smith**

Affiliation: **Conservation Programs Manager**

Address: **645 Main St., Suite F, Morro Bay, CA 93442** Phone Number: **805-772-4391**

Email: **nsmith@coastalrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **No**

Provide a Brief Project/Program Description (1 to 2 sentences):

The Alternatives Analysis and BMP Implementation Plan for the Oso Flaco Watershed is a planning, monitoring and outreach project to develop an alternatives analysis and implementation plan to address groundwater and surface water pollution, agricultural and storm water runoff and conveyance issues for the Oso Flaco watershed.

Describe Need for Project/Program (1 to 2 sentences):

Oso Flaco Lake has one of the highest DDT concentrations in the nation. The lake and creek are also listed as impaired water bodies for ammonia, boron, chloride, chlorophyll-a, chlorpyrifos, diazinon, electrical conductivity, fecal coliform, low dissolved oxygen, nitrate, nitrogen, pH, sediment toxicity, sodium, and turbidity with TMDLs under development. Focusing on individual components of the problem has been unsuccessful in part because of the need for a significant outlay of resource and in part because of landowners distrust of regulatory involvement.

Project Website (if any):

http:__www.coastalrcd.org_

Subregion (See Map) **South County**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **Osos Flaco Watershed, Osos Flaco Creek and Oso Flaco Lake**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Agriculture**

Watershed (if known) See Map: **Osos Flaco Watershed**

Project Cost Range: **<$250K**

Project Cost (if known): **$150,000**

Source of Cost Estimate:

Project Status: **Conceptual**

Describe status of **No permitting completed to date.**

permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

TBD.

Estimated ProjectStart Date: **7/6/1905**

Estimated ProjectEnd Date: **7/9/1905**

Identify proposed funding sources: **IRWM and potential contributions from CCRWQCB and others**

What is the Percent Range of Matching Funds? **26%-50%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

N_A

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

N_A

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

N_A

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Protect and improve source water quality_ support the development and implementation of TMDLs_ implement the California NPS Plan and the RWQCB Conditional Agricultural Waiver Program for irrigated agriculture.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Purchase, preserve, enhance, and restore land in ecologically sensitive ecosystems_ conserve natural resources

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Develop monitoring and reporting programs for groundwater basins in the region_ protect and improve groundwater quality from point and non-point source pollution, including nitrate contamination_ MTBE and other industrial, agricultural, and commercial sources of contamination_ naturally occurring

mineralization, boron, radionuclide, geothermal contamination_ and seawater intrusion and salts_ conduct public education and outreach about ground water protection_ identify areas of known or expected conflicts and target stakeholders on specific actions that they should take to help protect groundwater basin quality and supply_ recharge ground water with high quality water. This monitoring will help fill data gaps identified in the TMDL documents.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Integrate ecosystem enhancement, drainage control, and natural recharge into developmentprojects_ develop and implement public education, outreach, and advocacy

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

This project proposes to build off existing plans and studies to develop an integrated plan with three main focus areas: Planning, Monitoring, and Outreach. The plan will focus on integrated solutions, regulatory constraints, cost estimates and potential funding sources. Planning efforts will inform future TMDL implementation plans and result in solutions accepted by watershed stakeholders.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Much of Oso Flaco Watershed is within the Cachuma Resource Conservation District (Santa Barbara County), with Oso Flaco Lake and portions of the lower Creek in the Coastal San Luis Resource Conservation District. The Cachuma RCD has expended considerable effort on landowner outreach and agricultural solutions. Studies prepared by the Central Coast Regional Water Quality Control Board, California State Parks and Recreation and the Coastal San Luis Resource Conservation district (CSLRCD) have identified many concerns and potential solutions. However, solutions to many of these problems extend beyond the reach of agricultural BMPs. The relationship between regulators, public agencies and landowners in this watershed is contentious.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Other Comments:

Arroyo Grande Creek Channel Waterway Management Program

Sponsoring Agency/Organization: **San Luis Obispo County Flood Control and Water Conservation District, Zone 1_1A**

Contact Name: **Jill Ogren, PE**

Affiliation: **San Luis Obispo County Public Works**

Address: **County Government Center, Room 206, San Luis Obispo, CA 93408**

Phone Number: **805.781.5263**

Email: **jogren@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Provide a Brief Project/Program Description (1 to 2 sentences):

Construction and implementation of the Arroyo Grande Creek Waterway Management Program is intended to restore the capacity of the leveed lower three miles of the Arroyo Grande Creek channel and the Los Berros Diversion channel. Full implementation will provide 20-year flood protection while simultaneously enhancing a) water quality and b) sensitive species habitat within the managed channel.

Describe Need for Project/Program (1 to 2 sentences):

Current calculations suggest that the channel system has a discharge capacity of 1,700 cfs. This capacity equates to a storm event recurrence interval of approximately 2.8 years which places the surrounding areas in significant danger of recurring flood conditions.

Project Website (if any):

Subregion (See Map)

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **Oceano and Arroyo Grande**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **agriculture, industrial, residential**

Watershed (if known) See Map: **Arroyo Grande Creek Watershed**

Project Cost Range: **>$5M**

Project Cost (if known): **$7,342,000**

Source of Cost Estimate: **Agency**

Project Status: **Design Phase**

Describe status of

permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources:

What is the Percent Range of Matching Funds? **<10%**

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Ecosystem restoration. Project provides riparian vegetation, bank stabilization, and stream shading benefiting ecosystem restoration, water quality, flood protection and aesthetics.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

The Arroyo Grande Creek Channel WMP is a comprehensive set of actions to increase the capacity of the leveed lower three miles of Arroyo Grande Creek and Los Berros Diversion Channels, while also enhancing water quality and sensitive species habitat within the managed channel. Actions include raising the height of the existing levees, managing in-channel vegetation to enhance habitat and reduce flow restrictions, reducing sediment deposition within the channel, implementing specific sediment removal projects, and raising the Union Pacific Railroad Bridge to accomodate higher water levels. Full implementation of the WMP elements will provide 20 year flood protection for the surrounding community.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

In 2006, the Zone 1_1A property owners voted to increase local assessments for channel maintenance, passing with 89% of votes cast. By increasing local revenues for channel maintenance management of the channel was able to remain in local hands. It should also be noted that the WMP was developed from an extensive alternatives analysis and in response to suggestions and with guidance from several State and Federal resource agencies that recognized the importance of approaching AG Creek channel maintenance from a comprehensive perspective. The WMP is the result of nearly a decade of planning, studies, alternatives development and analysis in order to ensure that future efforts fully capitalize on recent improvements in habitat while incorporating new approaches to flood management.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Implementation of the program will provide ugently needed flood protection for the disadvantaged community of Oceano and the highly productive agricultural areas of the Cienega Valley.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The Arroyo Grande Creek Watershed Memorandum of Understanding is in place and was deisigned to improve watershed conditions and limit sediment delivery from upslope areas to impacted reaches of Arroyo Grande Creek. The purpose of the MOU is to enhance an overall understanding of watershed issues and promote consensus between the parties in order to better protect, manage and enhance the Arroyo Grande Creek Channel.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

On March 5, 2001, the south levee breached during heavy rainfall and the most extensive flood damage occurred since the channel was constructed in 1961. The high flood risk of the current condition and the previous event highlights the need to take immediate action on specific elements of the overall WMP to begin increasing the capacity of the channel. Full implementation of the program elements would restore the channel capacity and provide 20-year flood protection to the surrounding area.

Other Comments:

Arroyo Grande Creek Watershed Program

South County

Sponsoring Agency/Organization: **Central Coast Salmon Enhancement**

Contact Name: **Steph Wald**

Affiliation:

Address: **229 Stanley Ave., Arroyo Grande, CA 93420** Phone Number: **805-471-3789**

Email: **steph@centralcoastsalmon.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The Arroyo Grande Creek Watershed Program Includes several projects arising from planning efforts that have occurred to address flood protection, habitat enhancement and water quality issues including the following: the Arroyo Grande Creek Watershed Management Plan (CCSE, 2009 Update), the Arroyo Grande Creek Erosion, Sedimentation and Flooding Alternatives Study (Swanson Hydrology and Geomorphology, 2005), Tally Ho Creek Planning Project (Waterways Consulting, 2010), Los Berros Nitrate TMDL Project Report (RWQCB, 2012) and the Arroyo Grande Creek Waterways Management Plan (Waterways Consulting, 2010). The project slate includes: modification of the Arroyo Grande Stream Gage (design 100% complete), replacement of Cecchetti Road Culvert (design 30% complete), implementation of the Tally Ho head-cut repair and sediment removal (design 50% complete), Tally Ho Low-flow channel option and Tally Ho Levee Enhancement, initiate nitrate reduction program for Los Berros Creek and invasive plant removal watershed-wide.

Describe Need for Project/Program (1 to 2 sentences):

The proposed projects will serve to reduce flood risk and sediment delivery to the main stem, improve wildlife habitat for rare and threatened species including steelhead and red-legged frogs, and address water quality issues.

Project Website (if any):

Subregion (See Map) **South County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address:

Land Use (e.g., urban, ag, rural residential etc.) See Map: **urban, ag, and rural residential**

Watershed (if known) See Map: **Arroyo Grande Creek**

Project Cost Range: **$1M-$5M**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Planning Phase**

Describe status of permitting: **program elements are at different stages of planning and permitting**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **Urban Streams Restoration Program (for Tally Ho projects), CDFW Fisheries Restoration Grant Program (for fish passage projects), DWR and SWRQB (for TMDL projects)**

What is the Percent Range of Matching Funds? **>51%**

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

The Tally Ho projects will improve stormwater management within the City of Arroyo Grande,

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Los Berros nitrate reduction projects will improve water quality for the Los Berros subwatershed.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Los Berros nitrate reduction projects will improve ground water quality for ag water supplies in the Los Berros subwatershed. The Tally Ho projects will reduce sediment sources to main stem surface water.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

The fish barrier modification projects serve to improve passage for steelhead and endangered species protection, the Tally Ho projects serve to enhance the riparian corridor and working with landowners to manage their creek adjoining properties for the values being restored, the nitrate reduction project will involve land use management and public education and the invasive plant removal project will provide invasive species reduction.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring,

banking/recharge, etc.)?

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

The Tally Ho projects will improve flood management and floodplain restoration within the City of Arroyo Grande.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

The project slate as a whole involves AG Creek MOU signatories including collaboration among urban, ag, rural and environmental interests, local control, public outreach and education for the Tally Ho subwatershed, invasive control and nitrate reduction projects.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

The flood protection elements address flood risk in the flood control channel including the community of Oceano and the South County Sanitation District's wastewater treatment plant.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

An outcome of the Arroyo Grande Creek Watershed Management Plan (CCSE, 2005) was the development and implementation of the Arroyo Grande Creek MOU which specifies roles and responsibilities of participating entities in the management of the watershed. Signatories include the City of Arroyo Grande, the County of San Luis Obispo, the Coastal San Luis RCD, Central Coast Salmon Enhancement, the NRCS and the South County Sanitation District. Additional cooperators which haven't become signatories but have stated willingness to participate include the US Fish and Wildlife Service, the California Department of Fish and Wildlife, State Parks and the Central Coast Regional Water Quality Control Board. The MOU group meets quarterly and has been cooperatively planning several of the proposed program elements herein.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Flood risk would continue to remain high for the flood control and Tally Ho reaches, steelhead migratory passage issues would persist and population would continue to decline, nitrate TMDL would not be addressed and presumably worsen, invasive plant species would continue to outcompete natives which leads to canopy tree decline which leads to water quality impairments.

Other Comments:

Signatories have discussed applying for funding together through IRWM opportunities and would work with

the County to refine the project slate put forth here in the next phase of project solicitation. Note that Arroyo Grande Creek Waterways Management Program projects are not yet included in the slate as CCSE is not up-to-date on time-lines and existing grant requests for those projects, and defers to the county to include those elements in the solicitation process.

Atascadero Creek Watershed Management Plan

North County

Sponsoring Agency/Organization: **City of Atascadero**

Contact Name: **David Athey**

Affiliation: **Deputy Public Works Director**

Address: **6500 Palma Avenue** Phone Number: **805-470-3424**

Email: **dathey@atascadero.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The City and Upper Salinas RCD will partner in the development of a Watershed Management Plan for the Atascadero, Graves, Paloma and Boulder Creeks including the Salinas River within the City. The plan will identify locations where Low Impact Development(LID)_hydromodification control projects can be implemented. The Plan will allow the City more options in controlling hydromodification control and managing ground and stormwater resources. In addition, the plan will identify strategies for improving watershed health and maintaining adequate flow and groundwater recharge at the headwaters of the Salinas River.

Describe Need for Project/Program (1 to 2 sentences):

The City does not currently have a Watershed Management Plan. A Watershed Management Plan will provide the City with additional options for implementing LID_Hydromodicaton control projects within the City. As these sub-watersheds are at the headwaters of the Salinas River and are know steelhead habitats, identification of holistic watershed management strategies and groundwater recharge options are key to maintaining and increasing the viability of the Atascadero sub-basin and watershed eco-system.

Project Website (if any):

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **Project Covers the entire City of Atascadero**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban to Suburban**

Watershed (if known) See Map: **Atascadero, Graves, Paloma, Boulder**

Project Cost Range: **$250K-$500K**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Conceptual**

Describe status of permitting: **None**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Not yet started.

Estimated ProjectStart Date: **1/1/2014**

Estimated ProjectEnd Date: **1/1/2016**

Identify proposed funding sources: **100% IRWM**

What is the Percent Range of Matching Funds? **<10%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

This project will increase groundwater recharge through the identification of projects where groundwater recharge can occur in Atascadero's watersheds. The projects will be identified within the Atascadero Sub-Basin. The projects will be used to mitigate new impervious surface that is constructed in Atascadero. Part of the analysis will include identification of key infiltration areas within the watershed to maximize groundwater recharge and support the long term stability of the basin.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

This project will improve water supply sustainability by identifying sites where groundwater recharge can occur. The project sites will mitigate the deleterious effect of impervious surfaces on groundwater recharge. This project will also aid in groundwater management and the long term sustainability of groundwater supply in the Atascadero Sub-basin.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

This project will identify project sites near the Atascadero Sub-basin that will be used to infiltrate groundwater. This will aid in drought preparedness by providing additional infiltration locations in low-rainfall years.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

This project will improve water quality through infiltration of high quality stormwater and identify strategies for lessening pollution loads throughout the watershed.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

This project will increase environmental stewardship by identifying opportunities for community wide education and collaboration with private landowners. In addition, strategies for enhancing threatened and_or key riparian species will be identified. The plan will provide targeted land-use management projects and options to ensure the future health of the watersheds and will include recommendations for stream flow management to ensure maximum stormwater catchment and infiltration in key areas of the City.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. The Watershed plan will identify sites that can be used to infiltrate groundwater into the Atascadero Sub-basin. Increased infiltration will increase the amount of available groundwater in the Atascadero sub-basin.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

This project will support the City's effort to implement Low Impact Development_Hydromodifcation control by providing city-wade targeted infiltration sites and city-wide analysis and management of future impacts related to increases in impervious surfaces due to development. Increased infiltration of stormwater will reduce flooding within the City in areas known to be at rick during high rainfall years. In addition, the plan will be used to identify floodplains and restore those floodplains through the identification of potential projects. The plan will provide a basis for city-wide coordinated stormwater management rather than based on individual projects.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

The Watershed plan will provide the City flexibility with LID_.Hydromodification control within the City. The plan will provide the City with additional control over stormwater solutions which will lead to better management, public understanding and acceptance. In addition, a holistic watershed management plan will include public outreach and education opportunities for the public in regards to ecosystem health, groundwater recharge and water conservation.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

The project will provide opportunities for revegetation and enhancement of watershed health which will assist in reversing climate change impacts such as temperature rises in local creeks and drought conditions and decreased in-stream flows within the Salinas River and its tributaries.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The City of Atascadero will partner with the Upper Salinas-Las Tablas RCD to develop a comprehensive watershed management plan.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

City residents, developers and the City will have less options for implementation of LID and hydromodification controls. This means that projects that could potentially benefit groundwater recharge will likely not occur, along with the associated benefits of improved groundwater management, long-term groundwater stability, stream stabilization, ecosystem health, and water quality improvement.

Other Comments:

Beach Street Alley Waterline Replacement

South County

Sponsoring Agency/Organization: **Oceano Community Services District**

Contact Name: **Doug Groshart, PE**

Affiliation: **DPSI, Inc. - District Engineer**

Address: **545 Higuera Street, San Luis Obispo, CA** Phone Number: **(805)250-2891**

Email: **dgroshart@dpsiinc.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Maybe**

Provide a Brief Project/Program Description (1 to 2 sentences):

OCSD is seeking grant funding to assist with the replacement of an existing 4-inch diameter water line, approximately 840 feet in length. The project is located in the alley between Beach Street and Highway One, beginning at 17th Street and ending 180 feet east of 19th Street in Oceano, CA.

Describe Need for Project/Program (1 to 2 sentences):

The existing line is undersized for current and projected system demands, as well as for current fire flow needs (per the OCSD Water Master Plan). Additionally, given the line's age and thin-walled material, it is subject to frequent failures and requires regular repair.

Project Website (if any):

N_A

Subregion (See Map) **South County**

If Regional, please indicate which Subregions: **South County**

Nearest Cross Street or Street Address: **17th Street and Beach Street**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Commercial Retail**

Watershed (if known) See Map: **Five Cities**

Project Cost Range: **<$250K**

Project Cost (if known): **$225,000**

Source of Cost Estimate: **Engineer**

Project Status: **Design Phase**

Describe status of permitting: **Awaiting transfer of information from Wallace Group (previous District Engineer) with specific planning information. A preliminary analysis was performed by Wallace Group for this project. The analysis showed that**

the project was outside of the Coastal Zone.

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

While it's not certain, it is believed that CEQA_NEPA analysis has been completed (again, pending transfer of information from Wallace Group).

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **Approximately $32k has been budgeted in FY 13_14 for Water System Infrastructure improvements (approximately 14% of the project's estimated cost).**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

The project will minimally increase water conservation by eliminating frequent (and often substantial) leaks from the existing line.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

The project will improve the existing water supply by increasing the existing capacity to meet user and fire flow demands. The new line will also be sized to allow for future expansion in the area to projected buildout flows (based upon District Zoning).

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The project will greatly improve water system operational efficiencies and water supply reliability in the immediate area of the project. Given the frequent need for repairs and service outages during repairs on the existing line, overall system operational efficiency will be improved as well. This will allow the Operations Staff the ability to devote more time to other areas of system operations instead of regular repairs of this line.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

The project will potentially reduce the possibility of contamination of the water supply in the local area of the project. In the event of a pipe rupture, the possibilities for backflow into the line (and potential contamination) increase.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

The project will have minimal environmental benefits other than those realized with eliminating the frequent need for repairs. Typical repairs require excavation and installation, requiring heavy equipment, which increase possible greenhouse gas emissions, noise, dust and traffic concerns.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

The project will eliminate frequent leaks in the system which will allow for more efficient use of groundwater.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

This project will not have any impact on flood management.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

This project will provide outreach from OCSD to the Oceano Community and demonstrate that the OCSD is doing all that they can to ensure a safe, reliable water supply.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

The project will address water-related needs for the disadvantaged community of Oceano by increasing supply and fire flow capacities, as well as decreasing potential for local contamination due to backflow.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

The project has minimal impact on climate change concerns. There will be a reduction of green house gas and dust issues realized by eliminating the need for frequent repairs to the line (heavy equipment, excavation, traffic issues, dust issues).

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Maybe

If yes or maybe, please explain:

OCSD is open to any available grant funding for the purposes of improving the system infrastructure for the disadvantaged Oceano Community.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the project is not implemented, most likely the line will stay in its current state (undersized, frequently in need of repairs, etc.) and fire flow capacities will not be met.

Other Comments:

The project is technically still in the design phase, but is approximately 80-90% complete. Upon receipt of funding approval, the design could be completed in very short order.

Cambria Pump Station

North Coast

Sponsoring Agency/Organization: **County of San Luis Obispo, Department of Public Works**

Contact Name: **Eric Laurie**

Affiliation: **County of San Luis Obispo, Department of Public Works**

Address: **County Government Center, Room 207, San Luis Obispo, CA 93408**

Phone Number: **805-788-2758**

Email: **elaurie@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

This project consists of the construction of a new storm water pump station and outlet structure pumps floodwaters from the lowest part of West Village through a 42-inch diameter discharge pipe directly into Santa Rosa Creek. The project's purpose is to significantly reduce flooding in the saump area of the West Village of Cambria.

Describe Need for Project/Program (1 to 2 sentences):

In March 1995, San Luis Obispo County experienced one of the worst flood events in its history. Cambria's West Village, one of the County's most flood-prone areas, became a lake as Main Street businesses found themselves immersed in nearly 6 feet of standing water. County Public Works Department responded to this disaster by implementing the three phase Cambria Flood Mitigation Project (Project). The Cambria Pump Station project is the final phase of the three-phase Cambria Flood Control Project, Phase I consisted of a new Santa Rosa Creek bypass structure at the Hwy 1, and Phase II constructed a pressure storm drain system to collect and convey floodwater from the surrounding hills directly into Santa Rosa Creek.

Project Website (if any):

http:__www.slocountywater.org

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **Main Street, West Village, Cambria, CA**

Land Use (e.g., urban, ag, rural residential etc.) See Map:

Watershed (if known) See Map:

Project Cost Range: **$1M-$5M**

Project Cost (if known): **$1,165,920**

Source of Cost Estimate:

Project Status:

Describe status of permitting: **In process (30%) - Estimated Completion by May 2014**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

In process (30%) - Estimated Completion by April 2014

Estimated ProjectStart Date: **7/1/2008**

Estimated ProjectEnd Date: **10/1/2014**

Identify proposed funding sources: **Funding for Capital Costs: County funds to Special Districts_ Flood Control GeneralFunding for O&M: County Operations Budget for maintenance to be completed by County forces**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)?

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

No

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

No

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

No

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

No

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

This project protects groundwater from point and non-point pollution.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

The project benefits the community of Cambria by reducing or eliminating flood water in the West Village area. This project is a flood control project and, as such, does not have water quality or water supply benefits. This project merits consideration as it will alleviate the flooding risk in an area seriously flooded in 1995, which resulted in severe property damage.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The Cambria Community Services District. Also, FEMA funds provided for the completion of the first two phases of the overall Cambria Flood Control Project and completion of a a portion of the Cambria Pump Station.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Other Comments:

Closing Priority Conservation Data Gaps

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **Coastal San Luis Resource Conservation District**

Contact Name: **Nicole Smith**

Affiliation: **Conservation Programs Manager**

Address: **645 Main St., Suite F, Morro Bay, CA 93442** Phone Number: **805-772-4391**

Email: **nsmith@coastalrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The project will address the top priority data gaps identified by the Countywide Watershed Planning Phase I. Data gaps will be identified by September 2013 with priority ones chosen soon after.

Describe Need for Project/Program (1 to 2 sentences):

To better manage and protect our natural resources we need a clear understanding of issues, dynamics and connections occuring in our watersheds. The priority data gaps were identified in order to support informed water management

Project Website (if any):

nsmith@coastalrcd.org

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions: **Countywide**

Nearest Cross Street or Street Address: **N_A**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **all land uses**

Watershed (if known) See Map: **all watersheds**

Project Cost Range: **$250K-$500K**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Conceptual**

Describe status of permitting: **N_A**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

N_A

Estimated ProjectStart Date: **7/6/1905**

Estimated ProjectEnd Date: **7/9/1905**

Identify proposed funding sources: **IRWM, in-kind contributions and potential grant funding. If the project is accepted into the regional grant additional work can be completed to produce a line item budget and estimate contributions.**

What is the Percent Range of Matching Funds? **<10%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

TBD

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

TBD

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

TBD

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

TBD

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

TBD

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

TBD

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood

control projects, system operations, stream/floodplain restoration, etc.)?

TBD

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

TBD

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

TBD

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

TBD

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Depends on specific data gaps chosen.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Other Comments:

Community Based Social Marketing - Paso Groundwater Basin Community (water quality & quantity)

North County

Sponsoring Agency/Organization: **Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)**

Contact Name: **Laura Edwards**

Affiliation: **Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)**

Address: **65 South Main Street, Suite 107, Templeton, CA 93465** Phone Number: **805-434-0396 x 5**

Email: **laura@us-ltrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Provide a Brief Project/Program Description (1 to 2 sentences):

Launch a community based social marketing (CBSM) campaign to grow a community-wide understanding for local water issues (quality & quantity) in both the rural and urban communities.

Describe Need for Project/Program (1 to 2 sentences):

Severe water supply shortages and TMDL listings show that residents in the Paso Robles Groundwater Basin require urgent outreach to bring an understanding of how residents can participate in creating solution-oriented behavior changes for water conservation and basin preservation.

Project Website (if any):

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **North County at large**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **all**

Watershed (if known) See Map: **Multiple - Paso Robles Groundwater Basin**

Project Cost Range: **<$250K**

Project Cost (if known): **$172,000**

Source of Cost Estimate: **Agency**

Project Status: **Design Phase**

Describe status of permitting: **Permits not required**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

CEQA exempt

Estimated ProjectStart Date: **1/1/2014**

Estimated ProjectEnd Date: **1/31/2016**

Identify proposed funding sources: **Grants, local municipality, Community Services Districts**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **San Miguel**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No, unless public education and behavior change provides the impact needed for this project

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

No, unless public education and behavior change provides the impact needed for this project

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes. Drought preparedness & education.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

No

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. Public awareness, education and behavior change.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. Public awareness, education and behavior change.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Yes. Public awareness, education and behavior change.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. Public awareness, education and behavior change.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes. Public awareness, education and behavior change in disadvantaged communities.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes. Adding vegetation will be a recommended behavior change.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Awareness levels of water issues will remain as they are and water supplies will continue to diminish.

Other Comments:

Community Water Systems for Subdivided Regions Overlying the Paso Robles Groundwater Basin

North County

Sponsoring Agency/Organization: **Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS) (predecessor to future California Water District)**

Contact Name: **Jerry Reaugh, Board President**

Affiliation: **Paso Robles Agriculture Alliance for Groundwater Solutions**

Address: **P. O. Box 1499, Paso Robles, CA 93447** Phone Number: **(805) 440-7300**

Email: **jerry@reaughj.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The drought of 2011-2013 in San Luis Obispo County has resulted in a drop in the groundwater levels of the Paso Robles Groundwater Basin, and some rural residents located within subdivided rural lands have reported their wells have gone dry. These wells are expected to have been drilled shallow and without full consideration as to the risk associated with declining groundwater wells, and rather than drill new wells for hundreds of rural residential parcels, the organization of a community water system and installation of the pipes, wells, and storage tank to deliver groundwater to these residents is a project that will provide a higher reliability to the rural residents.

Describe Need for Project/Program (1 to 2 sentences):

Rural residents need a highly reliable supply of water for their homes and to protect home's value. A community water system would provide a cost effective means to provide a highly reliable water supply to subdivided rural residents that reside on small parcels, typically between 1 and 10 acres.

Project Website (if any):

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **Areas overlying the Paso Robles Groundwater Basin in the North San Luis Obispo County**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Rural residents**

Watershed (if known) See Map: **Salinas, Creston, Shandon**

Project Cost Range: **$1M-$5M**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Conceptual**

Describe status of permitting: **n_a**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

n_a

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **Grants and Bonds**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)?

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes - the project will provide a community water system to rural residents, and this new community system will be more reliable than the each rural resident's individual wells.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes - the project will provide a community water system to rural residents, and this new community system will be more reliable than the each rural resident's individual wells.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Improvements to water quality are unknown at this time.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Improvements to environment are unknown at this time.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

The project will not have a net effect on the groundwater storage. The project will improve the

management of groundwater supplies to rural residents, and will improve the reliability of supply to homes and eliminate the problem of wells going dry during drought.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes, the project will involve collaboration of rural residents with the California Water District that is being planned in the area. Alternatively, these pockets of rural residents may wish to be organized as County Service Areas.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Technically, no_ however, there are areas of densely subdivided rural residental areas that economically could be judged as DAC, but are presently not identified on the DAC list.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

Describe what impacts, if any, will occur if the Project/Program is not implemented:

The cost of individual wells is higher than the cost to be connected to a community water system, so the economic impact to the rural residents will be higher and if a resident's well goes dry, their immediate captial cost will impact them. Also the reliability of water supply will be imparied for each individual attempting to manage their supply.

Other Comments:

Conjunctive Use and Groundwater Banking Evaluation

South County

Sponsoring Agency/Organization: **Oceano Community Services District**

Contact Name: **Mary Lucey**

Affiliation: **Oceano Community Services District**

Address: **1655 Front Street, Oceano, CA 93445** Phone Number: **805-704-1812**

Email: **marylucey15@yahoo.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

This project would provide an evaluation of conjunctive use and groundwater banking opportunities in the South County Sub-Region. A conjunctive use and groundwater banking program would provide an opportunity for the water users overlying the Santa Maria Groundwater Basin to effectively manage their portfolio of supply sources and improve their reliability.

Describe Need for Project/Program (1 to 2 sentences):

The groundwater supply sources of the South County Sub-Region have limited long-term (year over year) storage capability and could benefit from a reliable storage or conjunctive use program to improve realibility during drought periods.

Project Website (if any):

Subregion (See Map) **South County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **1655 Front Street, Oceano, CA 93445**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Multiple**

Watershed (if known) See Map: **Five Cities**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate: **Engineer**

Project Status: **Conceptual**

Describe status of permitting: **Pending**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Pending

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources:

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

A conjunctive use and_or groundwater storage program could allow for additional water supplies to be utilized under different hydrologic conditions in order to maintain the reliability of existing supplies.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

The project could identify ways to maximize existing water rights and implement new water supply management policies and agreements to enhance the sustainability of all South County Sub-Region water supplies.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The project could identify new water supply management policies and agreements, including operational changes, to enhance the sustainability of South County Sub-Region water supplies.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

The project will evaluate water supply management policies and agreements to enhance the way in which the groundwater basin is monitored and managed.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education,

collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

The project will identify ways to implement new water supply management policies and agreements to enhance the way in which stakeholders collaborate to manage water resources.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes, this project will include evaluation of groundwater storage_conunctive use options for the community of Oceano.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

This project could identify relevant climate change concerns and asses the benefit of using a conjunctive use or groundwater banking program too address those concerns.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Other stakeholders within the Santa Maria Groundwater Basin would participate in the development of this project in order to develop a well informed evaluation.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Other Comments:

Conservation Planning for North Coast Landowners

North Coast

Sponsoring Agency/Organization: **Upper Salinas-Las Tablas Resource Conservation District**

Contact Name: **Laura Edwards**

Affiliation: **Upper Salinas-Las Tablas Resource Conservation District**

Address: **65 S. Main Street, Templeton, CA 93465** Phone Number: **805-434-0396 x 5**

Email: **laura@us-ltrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

This project will include the completion of conservation plans for rural and agricultural landowners in the North Coast region. Conservation plans will be completed by a certified conservation planner and will identify immediate and potential resource concerns and develop strategies for implementing on-site solutions and conservation practices. The goal of a conservation plan is to work with the landowner to develop a combination of different treatments that work together to address the overall natural resource needs on a site. Resources addressed in conservation plans include water, soil, economic, and human.

Describe Need for Project/Program (1 to 2 sentences):

The US-LT RCD has been working with a group of landowners in the North Coast community that have expressed a need for indentifying and developing strategies to address resource concerns on their property.

Project Website (if any):

None

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **n_a**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Rural Lands and Agricultural**

Watershed (if known) See Map: **Arroyo de la Cruz, Cambria, Cayucos**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Ready for Implementation**

Describe status of permitting: **None needed**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Not needed

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **Natural Resources Conservation Service, grants**

What is the Percent Range of Matching Funds? **26%-50%**

Does Project Serve a Disadvantaged Community (DAC)? **San Simeon**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes, the program will work with landowners to identify areas where water is being used inefficiently and develop and implement strategies for more efficient use.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes, water quality and management of water supplies will be addressed in conservation plans as well as ways it could be improved.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes, the program will identify and address inefficient water systems and management through the development of conservation plans.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes, water quality for on site use as well as point or non-point source contaminants will be addressed in conservation plans.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes, the project will give landowners the tools they need to implement conservation practices on their properties that will expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reduation and river_stream flow management as well as additional environmental concerns.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats

of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes, the project will promote local management of groundwater resources by indentifiying areas where groundwater can be used more efficiently and effectively and implementing solutions.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Yes, the program will enhance watershed management by providing landowners with site specific conservation strategies and practices that address flooding concerns. Practices may include stream restoration, vegetation management, erosion control, etc.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes, the program will provide education and outreach to the North Coast community on proper watershed management.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes, conservation plans will be improve water resources management and outreach in San Simeon.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes, conservation plans will identified areas where water and energy are being used inefficiently and how that can be improved upon.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The US-LT RCD will work with the Natural Resources Conservation Service to provide funding for landowners to implement conservation practices identified in their conservation plan.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Suitable conservation practices to address resource concerns on private land will not be identified. Resource concerns may not be neglected.

Other Comments:

County Service Area 10 - Clearwell Tank Roof Replacement

North Coast

Sponsoring Agency/Organization: **San Luis Obispo County Flood Control & Water Conservation District**

Contact Name: **Eric Laurie**

Affiliation: **San Luis Obispo County Flood Control & Water Conservation District**

Address: **1050 Monterey Street, Room 206, San Luis Obispo, CA 93408** Phone Number: **805-788-2758**

Email: **elaurie@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **No**

Provide a Brief Project/Program Description (1 to 2 sentences):

The Cayucos Clearwell Tank, which holds the treated water prior to sending to distribution system, has multiple patches of corrosion in its exterior coating. The coating surface has deteriorated and needs to be completely repainted.

Describe Need for Project/Program (1 to 2 sentences):

This repair will greatly extend the life of the tank.

Project Website (if any):

http:__www.slocountywater.org

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **1675 Cabrillo Avenue, Cayucos, CA**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Agriculture**

Watershed (if known) See Map: **Cayucos Watershed**

Project Cost Range: **<$250K**

Project Cost (if known): **$160,000**

Source of Cost Estimate: **Contractor**

Project Status: **Conceptual**

Describe status of permitting: **2009_2010**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

2009_2010

Estimated ProjectStart Date: **7/1/1905**

Estimated ProjectEnd Date: **7/9/1905**

Identify proposed funding sources: **Local _ Operations & Maintenance**

What is the Percent Range of Matching Funds? **>51%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes, the project will increase the life of the existing clearwell tank.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes, an operational storage tank improves the operation efficiency of the water system.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

No.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

No.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

No.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes, project maintains tank in service which provides water resource management and local control over

water system.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

N_A

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the Clearwell Tank Roof replacement is not implemented, the tank will continue to deteriorate and present operational issues for operation of the water system.

Other Comments:

County Service Area 10A - New 200k Gallon Storage Tank

North Coast

Sponsoring Agency/Organization: **San Luis Obispo County Flood Control & Water Conservation District**

Contact Name: **Jeff Lee**

Affiliation: **San Luis Obispo County Flood Control & Water Conservation District**

Address: **1050 Monterey Street, Room 206, San Luis Obispo, CA 93408** Phone Number: **805-781-1043**

Email: **jlee@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **No**

Provide a Brief Project/Program Description (1 to 2 sentences):

This project will install a 210,000 gallon water storage tank (residential storage requirement only) at Tank Site 6 (as identified in the Cannon Tank Siting Study) and include the associated waterlines. The implementation plan is the continue work to produce an environmental document and obtain Coastal Commission approval before applying to USDA for a loan to fund design, right-of-way, permitting and construction of the project.

Describe Need for Project/Program (1 to 2 sentences):

The CSA 10A water system, at buildout, requires a total water storage capacity of 494,000 gallons, to meet current residential AWWA and CFC standards. The water system storage is currently deficient by approximately 210,000 gallons. The construction of a new 210,000 gallon water storage tank is necessary in order for the water system to meet the required storage for minimum fire flow requirement.Purpose: For property protection, safety, water quality improvement

Project Website (if any):

http:__www.slocountywater.org

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **Chaney Avenue, Cayucos, CA**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Agriculture**

Watershed (if known) See Map: **Cayucos Watershed**

Project Cost Range: **$1M-$5M**

Project Cost (if known): **$1,100,000**

Source of Cost Estimate: **Agency**

Project Status: **Conceptual**

Describe status of permitting: **The environmental permitting process for this project is expected to be extensive since the project is within the jurisdiction of the CA Coastal Commission with possible visual impacts in the coastal zone.**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

late 2013

Estimated ProjectStart Date: **7/4/1905**

Estimated ProjectEnd Date: **7/7/1905**

Identify proposed funding sources: **USDA low-interest loan**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes, project provides additional water storage to improve fire flow, water reliability and reservoir storage.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes.project provides additional reservoir storage for water reliabilitiy and for fire flow storage requirements.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes. The CSA 10A water system, at buildout, requires a total water storage capacity of 494,000 gallons, to meet current residential AWWA and CFC standards. The water system storage is currently deficient by approximately 210,000 gallons. The construction of a new 210,000 gallon water storage tank is necessary in order for the water system to meet the required storage.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes, project matches water quality of existing system.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

No

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes, project allows for operational management of groundwater for fire flow and reservoir storage.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

N_A

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If this project is not implemented, the water system will not meet the required storage capacity of 494,000 gallons to meet current residential AWWA and CFC standards.

Other Comments:

County Service Area 16 - New Storage Tank

North Coast

Sponsoring Agency/Organization: **San Luis Obispo County Flood Control & Water Conservation District**

Contact Name: **Jeff Lee**

Affiliation: **San Luis Obispo County Flood Control & Water Conservation District**

Address: **1050 Monterey Street, Room 206, San Luis Obispo, CA 93408** Phone Number: **805-781-1043**

Email: **jlee@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **No**

Provide a Brief Project/Program Description (1 to 2 sentences):

Addition of this new storage tank increases water supply by a necessary 434,000 gallons.

Describe Need for Project/Program (1 to 2 sentences):

An additional 434,000 gallons of water storage is necessary to meet build-out needs and a fire-flow requirement of 2,750 gpm for two hours.

Project Website (if any):

http:__www.slocountywater.org

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **To be Determined_ Master Plan suggests adjacent to existing tank on Toby Way, Shandon**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Agriculture**

Watershed (if known) See Map: **Shandon Watershed**

Project Cost Range: **$1M-$5M**

Project Cost (if known): **$1,379,000**

Source of Cost Estimate: **Other**

Project Status: **Conceptual**

Describe status of permitting: **Programmed to start in FY15-16**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Programmed to start in FY15-16

Estimated ProjectStart Date: **7/1/2015**

Estimated ProjectEnd Date: **6/30/2017**

Identify proposed funding sources: **To be Determined.**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

The most limiting demand condition for system storage is maximum day demand plus fire flow demand. The tank needs to meet three volume requirements: equalization storage, emergency storage, and fire storage. Equalization storage is required to meet water system demands in excess of what supply can provide during peak demand conditions. Emergency storage is the volume of water available to sustain sanitary needs in the event that an emergency cuts off the normal water supply. The amount of time to restore the normal water supply was estimated at 72 hours, and the basic sanitary demand per capita was estimated to be 50 gallons per day. Fire storage is required to meet the highest fire-flow demand in the CSA 16 water system, which is for school fire protection: 2750 gallons per minute for 2 hours.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

See above.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes, the project will provide operational efficiencies for the water system, community build-out and fire flow.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes, water quality from the water storage tank will match the water quality within the existing system.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

No.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes, storage within a new water tank will provide flexibility and operational consideration for management of the groundwater in the Paso Robles groundwater basin.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

N_A

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the project is not implemented the community will not have sufficient water for community build-out and fire flow storage. This will limit the planning and operational decision making process for the community.

Other Comments:

County Service Area 23 (CSA 23) Water Reliability Program

North Coast

Sponsoring Agency/Organization: **County of San Luis Obispo - Public Works Dept**

Contact Name: **Jill Ogren**

Affiliation:

Address: **1050 Monterey Street, Room 206, San Luis Obispo, CA 93408**

Phone Number: **805-781-5263**

Email: **jogren@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Provide a Brief Project/Program Description (1 to 2 sentences):

The CSA 23 Water Reliability Program was developed to provide alternatives for addressing additional sources of water for the Community of Santa Margarita for purposes of drought reliability or other water emergency. The program identifies multiple alternatives and projects. These are described in the Santa Margarita California (CSA 23) 2010 Water Supply Reliability Report prepared by the SLO County Department of Public Works. Some of the alternatives examined include a turnout on the State Water Pipeline (SWP), turnout and water treatment facility to use Nacimiento Lake water and local groundwater.

Describe Need for Project/Program (1 to 2 sentences):

The community of Santa Margarita currently has only one source of water - groundwater. It relies on two wells to meet its current water demands of approximately 175 acre feet per year. Well # 3 is a deep low producing well located near the SWP pipeline and provides approximately 25% of the community supply. Well #4 is a shallow high producing well on the west end of town that provides approximately 75% of the supply. During periods of low seasonal rainfall, water levels in the shallow well typically drop as in the drought of 1987-1992. In the event that water levels drop critically low in well #4 the remaining well cannot provide the community with the water needed to carry it through an extended or severe drought. In the event that the groundwater for some other reason such as an oil spill from the nearby railroad or other emergency rendering the groundwater unusable the community has no backup water supply. Providing an additional source of water provides the residents of CSA 23 access to potable water during a drought or other water emergency.

Project Website (if any):

http:__www.slocountywater.org

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **At the southeast portion of the town near county well site # 3 on Encina Ave near Hwy 58**

Land Use (e.g., urban, ag, rural residential etc.) See Map:

Watershed (if known) See Map:

Project Cost Range: **$500K-$1M**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Conceptual**

Describe status of permitting: **Land acquisitions_easements (0%)**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Two of the alternatives have a complete (100%) EIR - State Water turnout and Nacimiento Water turnout

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **Grants,loans, CSA 23 Water Rates and Changes**

What is the Percent Range of Matching Funds? **>51%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

All though the alternatives proposed would provide a back-up supply of water during a drought, development of a water conservation plan for the community is considered very important no matter which alternative is implemented.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

The community of Santa Margarita is reliant solely on two ground water wells, if either well were to be compromised through low ground water levels, water quality issues, or operationally the other well could not meet the community's demands for long. This project would allow for an emergency supply of water for the community.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

This is not a conservation effort but it does address long term drought preparedness through proposed connections to other sources. The project alternatives within the program would not be used to supply water to the community on an annual basis and would not provide for build out of the community. An additional water source could also provide for water system operational flexibility.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

No

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

All the alternatives proposed with the exception of development of additional groundwater have the benefit of perserving groundwater to some extent for the two creeks and its surrounding habitat by reducing the amount of pumping needed during a drought or water emergency .

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Some of the alternatives in the program provide groundwater benefits in that during periods of drought, the ability to use outside sources in lieu of groundwater helps to perserve groundwater to some extent for the two creeks and its habitat as well as surrounding ag lands

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

One of the alternatives presented in the program, involves a water tie-in with the State Water Project (DWR). Another alternative that was not included in the 2010 report in part due to the high costs associated with it but still viable involves tieing-into the water systems of two nearby water purveyors.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the proposal is not implemented, the community will have to abide by extreme water conservation as

mandated by the County Board of Supervisors through an ordinance in the event of a drought. In the event of an emergency that contaminates the ground water or renders the wells useless then requiring implementation of some emergency measures such as trucking water in. CSA 23 will continue to seek grant funding for this project or seek other alternatives to provide reliable water in a drought or other emergency. As this has been an issue since the drought of 1987-1992 many alternatives have been developed and analyzed for cost benefit. The 2010 Community report outlines a few of the options developed over the last 20 years.

Other Comments:

County Service Area 7A - Oak Shores - Interception Sewer System Replacement

North County

Sponsoring Agency/Organization: **County of San Luis Obispo**

Contact Name: **Eric Laurie, Project Manager**

Affiliation: **County of San Luis Obispo, Department of Public Works**

Address: **County Government Center, Room 207, San Luis Obispo, CA 93408**

Phone Number: **(805) 788-2758**

Email: **elaurie@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Maybe**

Provide a Brief Project/Program Description (1 to 2 sentences):

Construct new gravity sewerlines, 8 lift stations, manholes, pipe bridges, and pump systems to replace the Eastside and Westside Interceptor Sewer System.

Describe Need for Project/Program (1 to 2 sentences):

The fact that raw sewage from over 500 homes now drains within pipelines beneath Lake Nacimiento, which is jointly used for recreation and drinking water supply for several of the County's communities through the Nacimiento Water Project, Nacimiento Water Company and Heritage Ranch Community Services District, and is pumped from an excessively deep wet well to the sewage treatment plant is cause for concern. Additionally, the sewer line was breached and began leaking in March, 2011, and needed emergency repairs. Further, accessing such a deep wet well for maintenance and repair of the pumps poses significant safety hazards associated with confined space entry. For these reasons, Public Works Department staff proposes to abandon the Interceptor and Lift Station #3 in exchange for a collection system that would drain above the lake level to the existing sewage plant.

Project Website (if any):

http:__www.slocountywater.org

Subregion (See Map) **North County**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **Throughout Oak Shores community**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Rural Lands _ Agriculture _ Recreation**

Watershed (if known) See Map: **Nacimiento Watershed**

Project Cost Range: **>$5M**

Project Cost (if known): **$6,000,000**

Source of Cost Estimate: **Other**

Project Status: **Conceptual**

Describe status of permitting: **Risk Assessment document prepared _ Conceptual Planning**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

To be determined

Estimated ProjectStart Date: **7/1/2013**

Estimated ProjectEnd Date: **6/30/2020**

Identify proposed funding sources: **County funds to special districts and CSA 7A budget**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

This project benefits include eliminating the risk that a leak or breach in the Interceptor Sewer system, now located in Lake Nacimiento, enters the lake, which is jointly used for recreation and drinking water supply for several of the County's communities through the Nacimiento Water Project, Nacimiento Water Company and Heritage Ranch Community Services District.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Relocation of the Intercepor sewerline out of the Nacimiento Lake waterline will help to protect the lakes drinking water supply_ protects and improves source water quality

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes, relocating active sewer lines outside of a water supply will increase the operational efficiency and reliability of the water supply.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes, relocating active sewer lines outside of an active water supply will increase the water quality of the water supply

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

This project will provide the opportunity for adjacent properties to develop to their best and highest use within the County Planning land use guidelines_ conserves natural resources_ watershed management and protection_ non-point source pollution reduction, management and monitoring_ ecosystem and

fisheries restoration and protection_ expands environmental stewardship

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

No

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Organizations involved in the project may include Monterey County Parks and the Oak Shores Community Association

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the project is not implemented, the existing sewer lines will not be relocated and the risk of water supply contamination will remain.

Other Comments:

County-wide Watershed and Creek Signage

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **US-LT RCD**

Contact Name: **Laura Edwards**

Affiliation: **US-LT RCD**

Address: **65 S. Main Street Suite 107, Templeton, CA 93465** Phone Number: **805-434-0396 x 5**

Email: **laura@us-ltrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Installation of educational watershed and creek signage throughout the County of San Luis Obispo

Describe Need for Project/Program (1 to 2 sentences):

San Luis County is vast and county residents are not well informed about their watershed and the vital role watershed health plays in water quantity and water quality. A signage program will bring awareness to county creeks and water conveyance systems and enhance the knowledge of how to care for and protect our vital water resources.

Project Website (if any):

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions: **county-wide**

Nearest Cross Street or Street Address: **n_a**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **All**

Watershed (if known) See Map: **All**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Ready for Implementation**

Describe status of **n_a**

permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

n_a

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources:

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

No

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

No

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Bringing awareness to local creeks and watersheds as a whole will focus efforts on educating the public and reducing harmful impacts to watersheds.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. It provides for enhanced environmental stewardship and public education.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. The proposed signage will serve as an educational tool allowing the genera public to be better connected and understanding of our local watersheds and the effect of watershed health on water quantity and quality.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood

control projects, system operations, stream/floodplain restoration, etc.)?

The project provides a component of watershed management through education and outreach.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

The project would provide educational and outreach to the general public and bring watershed health and planning efforts to the public in a visible way.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

The project would include signage throughout the County including in all disadvantaged communities.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The US-LT RCD would partner with the Coastal San Luis RCD and other county wide agencies for this project.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Lack of education and understanding of watershed health and the impacts to our existing water supply and conveyance systems will decease the effectiveness of holistic watershed management planning efforts.

Other Comments:

Countywide Watershed Planning Phase II

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **Coastal San Luis Resource Conservation District**

Contact Name: **Nicole Smith**

Affiliation: **Conservation Programs Manager**

Address: **645 Main St., Suite F, Morro Bay, CA 93442** Phone Number: **805-772-4391**

Email: **nsmith@coastalrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The Countywide Watershed Planning Phase II project will build on planning efforts to better prioritize conservation in the County. The project may include 1. Developing a computer program with local data to improve land use and conservation planning, 2. Training sessions on the computer tool for land managers and long range land use planners, 3. Hosting working group meetings to guide the plan development and other tasks as determined by the end of Phase I.

Describe Need for Project/Program (1 to 2 sentences):

Improved land use planning with conservation in mind and conservation planning with county priorities in mind will direct limited funds to the highest priority projects. Conservation projects address the root of water problems and are an important piece of solving issues related to water supply, flooding, water quality and ecosystem functions.

Project Website (if any):

nsmith@coastalrcd.org

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions: **Countywide**

Nearest Cross Street or Street Address: **N_A**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **all land uses**

Watershed (if known) See Map: **all watersheds**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Planning Phase**

Describe status of permitting: **N_A**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

N_A

Estimated ProjectStart Date: **7/6/1905**

Estimated ProjectEnd Date: **7/9/1905**

Identify proposed funding sources: **IRWM, in-kind contributions and potential grant funding. If the project is accepted into the regional grant additional work can be completed to produce a line item budget and estimate contributions.**

What is the Percent Range of Matching Funds? **<10%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes indirectly

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes indirectly

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes indirectly

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes indirectly

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes indirectly

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes indirectly

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Yes indirectly

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Maybe.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

We will work with the USLT RCD, the County and local conservation groups.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Other Comments:

Creston State Water Project Turnout

North County

Sponsoring Agency/Organization: **Requires formation of Water Purveying Entity**

Contact Name: **Claudia Salot-Engel**

Affiliation: **WRAC - At-Large Position**

Address: Phone Number: **805-239-9626**

Email: **clauda@thunderheadranch.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Consistent with the adopted Paso Robles Groundwater Basin Management Plan (March 2011) implementation strategies, this project would implement a supplemental water supply source to address the declining groundwater levels and to meet future water demand projections particularly in Creston (overlying basin's Creston Sub-Area). This project would require formation of a water purveyor entity, feasibility study, development of Subcontractor contract (and other necessary contracts), permitting, design, and implementation of a State Water turnout.

Describe Need for Project/Program (1 to 2 sentences):

The Resource Capacity Study prepared by the San Luis Obispo County Planning Department in November 2010 states that the Basin is near or at perennial yield – placing the basin at the most severe_ critical planning designation – and monitoring wells in the Paso Robles Groundwater Basin near the City of Paso Robles show continuous declining elevations indicating insufficient groundwater recharge to sustain current annual average pumping. Parts of the basin have experienced declining groundwater levels in excess of 70 feet over a relatively short period of time: 1997-2009, and those levels continue to drop.

Project Website (if any):

http:__www.slocountywater.org_site_Water%20Resources_Water%20Forum_

Subregion (See Map) **North County**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **N_A**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Various**

Watershed (if known) See Map: **Estrella River**

Project Cost Range: **>$5M**

Project Cost (if known): **$50,000,000**

Source of Cost Estimate: **Agency**

Project Status: **Conceptual**

Describe status of permitting: **None**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

None

Estimated ProjectStart Date: **1/1/2015**

Estimated ProjectEnd Date: **1/1/2025**

Identify proposed funding sources: **Assessments, Water rates**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes. Importing State Water as a new water supply source will offset the declining groundwater levels in the Paso Robles Groundwater Basin. This would utilize some portion of the District's 15,273 AFY of State Water excess allocation, assuming negotiations are successful with the SLO Flood Control District, CCWA, DWR, and Brenda Mesa.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes. Creston is currently solely dependent on groundwater. Importing State Water will diversify Creston's water supply and will allow the community to meet water demands sustainably (e.g. when available State Water could be used in lieu of groundwater, and vice versa).

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes. The supplemental water would diversify Creston's water supply portfolio, improving drought preparedness. For instance, when available State Water could be used in lieu of groundwater and vice versa, allowing flexibility in water supply management.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes. As groundwater levels decline, the basin becomes more susceptible to general water quality degradation, including issues related to the increased geothermal activity noted in a recent USGS study. Providing additional water supplies to offset groundwater use will help to reduce this water quality degradation.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship,

ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

No.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. Developing a State Water turnout to Creston would offset groundwater use and would improve Paso Robles Groundwater Basin management. New water sources are needed as demand is at or near the basin's 97,700 AFY perennial yield, providing the threat of basin overdraft. Without new water supplies the groundwater basin levels will continue to decline.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. This program would require formation of a water purveyor entity, which could in turn improve Creston's water supply management.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes. Climate change models suggest increased periods of low rainfall and prolonged periods of drought. Providing State Water would improve Creston's water supply management abilities in times of droughts.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Partnerships would be required in order to successfully form a water purveyor entity. Partnerships would also be required to contract for the State Water Project connection and entitlement. This would involve DWR, CCWA, Brenda Mesa, the SLO Flood Control District, existing local State Water Subcontractors, and the water purveyor.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If a State Water turnout is not implemented or negotiations are unsuccessful, Creston will continue to be solely dependent upon groundwater. Consequently, the community will continue to contribute to the the

current water quality issues, declining levels, and other issues with overall basin management.

Other Comments:

A conceptual_initial project cost range could be $25,000,000 to $50,000,000. The project cost will depend on entitlement sought (acre-feet per year), as initial State Water buy-in cost is $25,000 per acre-foot. Additional costs would include costs associated with negotiations, contracting, formation of the water purveyor, feasibility studies, planning, design and construction activities.

CSA 10A - Storage Tank Roof Replacement

North Coast

Sponsoring Agency/Organization: **San Luis Obispo County Flood Control & Water Conservation District**

Contact Name: **Eric Laurie**

Affiliation: **San Luis Obispo County Flood Control & Water Conservation District**

Address: **1050 Monterey Street, Room 206, San Luis Obispo, CA 93408** Phone Number: **805-788-2758**

Email: **elaurie@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **No**

Provide a Brief Project/Program Description (1 to 2 sentences):

This project will replace the roof of the Cayucos Water Treatment Facility main building, in County Service Area 10, ensuring the protection of the staff, equipment and facilities at the site.

Describe Need for Project/Program (1 to 2 sentences):

The metal roof on the main building at the Cayucos Water Treatment Facility, in County Service Area 10, is deteriorated and in need of replacement.

Project Website (if any):

http:__www.slocountywater.org

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **1675 Cabrillo Ave, Cayucos, CA 93430**

Land Use (e.g., urban, ag, rural residential etc.) See Map:

Watershed (if known) See Map: **Cayucos**

Project Cost Range: **$500K-$1M**

Project Cost (if known): **$569,000**

Source of Cost Estimate: **Agency**

Project Status: **Conceptual**

Describe status of permitting: **No permitting as of yet, though a Negative Declaration is expected for the project. Environmental Document expected October, 2014.**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

CEQA compliance expected October, 2014.

Estimated ProjectStart Date: **7/5/1905**

Estimated ProjectEnd Date: **7/7/1905**

Identify proposed funding sources:

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

No

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes. The new roof will protect the treatment facility's equipment, thereby ensuring the reliability of the the treated water supply.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

No

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

No

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

No

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

N_A

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the roof is not replaced on the Cayucos Water Treatment Facility's main building, the plant facilities and staff will be suceptible to the outside elements, and damage to vital plant equipment and facilities will occur, rendering the treatment facility non operational.

Other Comments:

CSA 16 - Waterline - Replace Centre Street

North County

Sponsoring Agency/Organization: **San Luis Obispo County Flood Control & Water Conservation District**

Contact Name: **Jeff Lee**

Affiliation: **San Luis Obispo County Flood Control & Water Conservation District**

Address: **1050 Monterey Street, Room 206, San Luis Obispo, CA 93408** Phone Number: **805-781-1043**

Email: **jlee@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Maybe**

Provide a Brief Project/Program Description (1 to 2 sentences):

The project will replace and upgrade the existing 6-inch water line to a 10-inch water line on Centre Street from 1st Street to 5th Street in Shandon.

Describe Need for Project/Program (1 to 2 sentences):

The existing water system incurs unnecessary head losses due to the inadequate size ofthe main water line along Centre Street. This will enable Shandon to effectively meet daily normal demands.

Project Website (if any):

http:__www.slocountywater.org

Subregion (See Map) **North County**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **Centre Street between 1st and 5th Street in Shandon**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Residential Suburban _ Residential Single Family**

Watershed (if known) See Map: **Shandon Watershed**

Project Cost Range: **$1M-$5M**

Project Cost (if known): **$1,223,000**

Source of Cost Estimate: **Other**

Project Status: **Planning Phase**

Describe status of permitting: **Not started_ project is in preliminary engineering phase**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Not started yet, programmed for FY14-15

Estimated ProjectStart Date: **7/1/2012**

Estimated ProjectEnd Date: **6/30/2017**

Identify proposed funding sources: **To be Determined**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes. This project will upgrade approximatley 2,750 linear feet of the existing CSA16 waterline system from 6-inch to 10-inch on Centre Street between 1st and 5th Streets. The existing water system incurs unnecessary head losses due to the inadequate water line size on Centre Street.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The Shandon water system is transmitted from two wells, via an 8-inch PVC pipe along Centre Street until it reaches First Street and Mesa Grande Drive. At the intersection of Centre and First Street the distribution system networks into 4, 6 and 8-inch PVC which contribues to unnecessary head losses within the system.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes, water quality from the water line improvements will match the water quality within the existing system.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

No.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

No.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

N_A

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the project is not implemented, the CSA16 water system will continue to incur head losses to the inadequate size of the water line. This will continue of the operational inefficiencies of the Shandon _ CSA16 water system.

Other Comments:

CSA 16 - Waterline - Upsize 1st Street

North Coast

Sponsoring Agency/Organization: **San Luis Obispo County Flood Control & Water Conservation District**

Contact Name: **Jeff Lee**

Affiliation: **San Luis Obispo County Flood Control & Water Conservation District**

Address: **1050 Monterey Street, Room 206, San Luis Obispo, CA 93408** Phone Number: **805-781-1043**

Email: **jlee@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Maybe**

Provide a Brief Project/Program Description (1 to 2 sentences):

The project will replace and upgrade the existing 6-inch water line to a 10-inch water line along 1st Street between San Juan and Centre Streets to meet fire flow requirements of 2,750 gallons per minute for schools.

Describe Need for Project/Program (1 to 2 sentences):

This project enables schools to meet the Uniform Fire Code required fire protection of 2,750 gpm for 2 hours and reduces high head losses within current waterline systems.

Project Website (if any):

http:__www.slocountywater.org

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **1st Street between San Juan and Centre Streets in Shandon, CA**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Residential Suburban and Residential Single Family**

Watershed (if known) See Map: **Shandon Watershed**

Project Cost Range: **$500K-$1M**

Project Cost (if known): **$660,000**

Source of Cost Estimate: **Other**

Project Status: **Conceptual**

Describe status of permitting: **Not started_ project is programmed for FY17-18**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Not started_ project is programmed for FY17-18

Estimated ProjectStart Date: **7/1/2013**

Estimated ProjectEnd Date: **6/30/2013**

Identify proposed funding sources: **To be Determined**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes, the project will replace and upgrade the existing 6-inch water line to a 10-inch water line along 1st Street between San Juan and Centre Streets.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

This project enables schools to meet the Uniform Fire Code required fire protection of 2,750 gpm for 2 hours and reduces high head losses within current waterline systems.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes, water quality from the water line improvements will match the water quality within the existing system.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

No.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

No.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education,

collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

N_A

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the project is not implemented, the CSA16 water system will continue to incur head losses to the inadequate size of the water line. This will continue of the operational inefficiencies of the Shandon _ CSA16 water system.

Other Comments:

CSA 16 - Waterline Loop N. 2nd to N. 3rd Streets

North Coast

Sponsoring Agency/Organization: **San Luis Obispo County Flood Control & Water Conservation District**

Contact Name: **Jeff Lee**

Affiliation: **San Luis Obispo County Flood Control & Water Conservation District**

Address: **1050 Monterey Street, Room 206, San Luis Obispo, CA 93408** Phone Number: **805-781-1043**

Email: **jlee@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Maybe**

Provide a Brief Project/Program Description (1 to 2 sentences):

This project will result in the installation of approximately 400 linear feet of 6-inch pipe thereby looping the water mains on Estrella Street from 2nd Street to 3rd Street in CSA16 _ Shandon.

Describe Need for Project/Program (1 to 2 sentences):

This project will improve waterline circulation and fire flows and pressures as outlined in the 2004 Water System Master Plan. Looping of the waterline will result in improved water pressure and reduce head losses during periods of fire flow.

Project Website (if any):

http:__www.slocountywater.org

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **between 2nd Street and 3rd Street in the community of Shandon**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Residential Suburban _ Residential Single Family**

Watershed (if known) See Map: **Shandon Watershed**

Project Cost Range: **<$250K**

Project Cost (if known): **$233,000**

Source of Cost Estimate: **Other**

Project Status: **Conceptual**

Describe status of permitting: **Not yet started, project is programmed for FY17-18**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Not yet started, project is programmed for FY17-18

Estimated ProjectStart Date: **7/1/2017**

Estimated ProjectEnd Date: **6/30/2018**

Identify proposed funding sources: **To be Determined**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes, the project will improve the existing water supply by increasing the operational efficiencies of the water system. The water system will be looped between 2nd Street and 3rd Street within the community of Shandon.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes, this project will improve waterline circulation and fire flows and pressures as outlined in the 2004 Water System Master Plan. Looping of the waterline will result in improved water pressure and reduce head losses during periods of fire flow.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes, the water quality within the looped water system will match the existing water quality.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

No.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

No.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

N_A

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If this proejct is not implemented, the waterline will continue to operate and function as it currently does. The system would not be looped and would continue to incur head losses and reduced water pressure.

Other Comments:

CSA 16 (Shandon) Water Reliability Project

North County

Sponsoring Agency/Organization: **County of San Luis Obispo**

Contact Name: **Jill Ogren**

Affiliation: **San Luis Obispo County Public Works Department**

Address: **1050 Monterey Street, Room 206, San Luis Obispo, CA 93408**

Phone Number: **805-781-5263**

Email: **jogren@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Maybe**

Provide a Brief Project/Program Description (1 to 2 sentences):

The CSA 16 Water Master Plan was developed in 2004 in order to more effectively plan for captial improvement projects and to provide alternatives for addressing additional sources of water for the Community of Shandon for purposes of drought reliability or response to a water emergency. Alternatives examined included a turnout on the State Water Pipeline (SWP), adding additional storage to meet Shandon's storage requirements, and local groundwater supply by the Paso Robles Ground Water Basin, which is currently being reviewed for supply and reliability issues.

Describe Need for Project/Program (1 to 2 sentences):

Shandon has several significant reasons to substantiate implementation of the CSA 16 State Water Connection Project. These include:Water Supply Reliability: Shandon relies solely on groundwater for its water supply. Ground water is susceptible to drought, water quality degradation, well contamination and climate change. Studies have shown that Shandon's wells and the Paso Robles Groundwater Basin are especially susceptible to all these risks. An additional water source would provide reliability to Shandon.Paso Robles Groundwater Basin Water Level Declines: Studies have shown that the Paso Robles Groundwater Basin has been declining and has reached its yield. Relying solely on the basin puts the future of Shandon's water supply at risk.Competing Water Rights: Shandon faces the potential of competing for groundwater rights with other entities that may have superior rights. As currently interpreted, California water rights indicate that overlying groundwater rights are superior to appropriative groundwater rights. Overlying groundwater rights are the rights of a property owner with property located above a common aquifer to reasonable use of that aquifer. Shandon's groundwater rights are considered appropriative groundwater rights. Thus, if there is not a surplus in the Paso Robles Basin after all reasonable and beneficial overlying rights are satisfied, Shandon's appropriative groundwater rights could potentially be challenged by entities with overlying groundwater rights.

Project Website (if any):

http:__www.slocountywater.org

Subregion (See Map) **North County**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **Community of Shandon**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Residential Rural _ Agriculture**

Watershed (if known) See Map: **Shandon Watershed**

Project Cost Range: **>$5M**

Project Cost (if known):

Source of Cost Estimate: **Other**

Project Status: **Conceptual**

Describe status of permitting: **One project in design - State Water Turnout. Water System Master Plan developed_ potential projects identified_ larger discussion necessary associated with Paso Robles ground water**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

One alternative is has completed CEQA (EIR) - State Water Turnout

Estimated ProjectStart Date: **6/26/1905**

Estimated ProjectEnd Date: **12/31/2013**

Identify proposed funding sources: **Community Reserves**

What is the Percent Range of Matching Funds? **26%-50%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

This provides a new water supply for Shandon (currently only groundwater). The alternatives proposed would provide a back-up supply of water during a drought, however, development of a water conservation plan for the community is considered necessary no matter which alternative is implemented.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Shandon is reliant solely on ground water wells, if either well were to be compromised through low ground water levels, water quality issues, or operational issues the other well could not meet the community's demands for normal daily demand or fire flows. This project would allow for an emergency supply of water for the community. A water reliability plan could forward the discussion associated with teh Paso Robles Groundwater Basin.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes, this project will conserve groundwater usage from the Paso Robles Groundwater Basin. Chosen alternatives address long term drought preparedness and provides sustainable, reliable water supply and a water reliability project would coordinate these efforts.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

No

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

The alternatives proposed with the exception of development of additional groundwater have the benefit of perserving the groundwater basin and impacts to surrounding habitat by reducing the amount of pumping needed during a drought or water emergency .

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Program alternatives provide benefits to the Paso Robles Basin through reduced pumping during periods of drought, the ability to perserve groundwater and to benefit habita as well as surrounding agricultural lands.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Maybe

If yes or maybe, please explain:

Shandon is within the Paso Robles ground water basin and will be involved in the overall discussion regarding the Paso Robles Groundwater Basin issues.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the project is not implemented, Shandon will not be able to access their State Water allocation and will continue to rely solely on groundwater from the Paso Robles Groundwater Basin. Relying solely on groundwater leaves Shandon's only water supply susceptible to groundwater level declines, well contamination and competing water rights.

Other Comments:

Emergency Water Turnout for Heritage Ranch CSD

North County

Sponsoring Agency/Organization: **Heritage Ranch CSD**

Contact Name: **John D'Ornellas**

Affiliation: **Heritage Ranch CSD**

Address: **4870 Heritage Ranch Road, Paso Robles, CA 93446** Phone Number: **805-227-6230**

Email: **john@heritageranchcsd.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The Project will provide an emergency turnout from the Nacimiento pipeline project, which allows the District receive raw lake water for its water treatment plant, during extreme drought conditions when the Nacimiento Lake level is at dead pool elevation (and thus lake water cannot be released through the Dam to the District's downstream gallery wells for river water intake to the District's water treatment plant). The District's customers include 3,500 residents, a public school, and a small commercial center.

Describe Need for Project/Program (1 to 2 sentences):

The Project will provide the District with an emergency means of accessing Nacimiento water that the District is already entitled to, during times of extreme drought. This will allow the District to provide the necessary potable water and fire protection water to serve its residents_customers, thus providing water for the protection of health and safety. Such an emergency water project has been mandated by the California Department of Public Health.

Project Website (if any):

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **See Project Street Address Above.**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Rural Residential**

Watershed (if known) See Map: **Nacimiento (10)**

Project Cost Range: **<$250K**

Project Cost (if known): **$40,000**

Source of Cost Estimate: **Engineer**

Project Status: **Design Phase**

Describe status of **A private property easement will be required, and District is in the early**

permitting: **stages of this process. Easement acquisition is anticipated by year-end 2013.**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

District will undertake the environmental review, and preparation of Negative Declaration or Exemption. Expected completion date, November 2013.

Estimated ProjectStart Date: **1/3/1900**

Estimated ProjectEnd Date: **5/15/2013**

Identify proposed funding sources:

What is the Percent Range of Matching Funds? **<10%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

This Project will allow access to existing water allocation of Nacimiento Water, during periods of low to zero flow from Nacimiento Dam (when the District's existing Gallery Wells would not be able to keep up with water demands).

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

This project will provide water supply reliability to the community of Heritage Ranch, during times when Nacimiento Lake levels are too low (at dead pool elevation) to allow release of water downstream of the dam to the District's gallery wells.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

This is a drought preparedness project, see above description. The District would be subject to extreme water conservation during this time, and will minimize water demand during severe drought conditions.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

The Project will not improve water quality.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

No.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring,

banking/recharge, etc.)?

No.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

This is a collaborative project between the Heritage Ranch CSD, County of San Luis Obispo, Nacimiento Commission customers to allow Heritage Ranch to be provided emergency water during extreme drought conditions.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Please see response to earlier question above on water resources management.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If this Project is not implemented, the District and its residents run the risk of having no potable water and fire protection water during drought conditions_low lake levels, which is unacceptable from a health and safety standpoint. The District is under mandate from the State Department of Public Health to provide an emergency water supply under such conditions.

Other Comments:

Evaluating land-surface subsidence and potential groundwater-storage losses as part of assessing proposed water banking sites in Paso Robles Groundwater Basin

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization:

Contact Name: **Jill Densmore**

Affiliation: **USGS**

Address: **3130 Skyway Blvd, Ste 602, Santa Maria, CA and 6000 J St, Sacramento, CA**

Phone Number: **805-878-6201**

Email: **jidensmo@usgs.gov**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Use InSAR to evaluate land-surface subsidence and any associated groundwater-storage losses in the Paso Robles Groundwater Basin.

Describe Need for Project/Program (1 to 2 sentences):

Subsidence and any associated groundwater-storage losses need to be determined and included in the Paso Robles groundwater-flow model update for the model to adequately evaluate groundwater conditions in basin. Data from the evaluation of InSAR will provide essential input for updating the groundwater-flow model that will be used to assess proposed water banking sites in the basin.

Project Website (if any):

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions: **Although the primary focus of the study would be the Paso Robles and North Counry area, the InSAR interferograms cover parts of all three regions (including Oceano and San Miguel) depending on the position of the satellite.**

Nearest Cross Street or Street Address:

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Agricultural, Industrial, Commercial, Rural Residential, Urban**

Watershed (if known) See Map: **Salinas, Creston, Shandon, Los Osos_Morro Bay, San Luis Obispo_Avila Beach, 5 Cities, Nipomo Mesa,**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate: **Other**

Project Status:

Describe status of permitting: **na**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

na

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **County?, USGS, IRWM**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

The project will evaluate the extent of land-surface subsidence and associated groundwater-storage changes. The data provided by this project are needed as input for aquifer-storage properties in the groundwater-flow model

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

The data from this project will improve the accuracy of the Paso Robles Basin groundwater-flow model. The data from this project are essential to provide input in the groundwater-flow model that will be used to assess the feasibility of groundwater banking. Without this data, the groundwater-flow model will lack input on aquifer-storage properties needed in the subsidence package. The subsidence package is a key element in evaluating the existing water supply, the potential for groundwater banking, and the sustainability of water supply in the basin.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The data from this project can be used in guiding placement of water-conveyance infrastructure to help prevent additional maintenance and operational costs because of damage resulting from land-surface subsidence.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

na

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

This project will aid decision-makers in groundwater-resource management by delineating the areal extent of land-surface deformation in the basin and evaluating the degree of compaction (most importanly, the inelastic portion) and any resulting groundwater-storage losses in areas of subsidence. By identifying susceptible areas, effective groundwater-resource management can be determined in order to minimize groundwater-storage losses in the basin and help protect groundwater recharge and banking areas.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

This project will help to improve groundwater management of the Paso Robles Groundwater Basin by providing a better understanding of the aquifer system and groundwater storage within the basin. The data from this project is essential for assessing the effectiveness of groundwater banking_recharge

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

The project has the potential to aid in flood management by minimizing system operations costs that can arise as a result of infrastructure damage in areas of land-surface deformation.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

This project will improve water-resource management in the Paso Robles Basin by providing model input needed for a water-resource program (the existing groundwater-flow model of the Paso Robles Basin).

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Although the focus of the study would be the Paso Robles and North Counry area, InSAR interferograms produced for this study cover two disadvantaged communities (Oceano and San Miguel). If there are land-surface deformation issues in these areas, they will be identified during this study.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

na

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Maybe

If yes or maybe, please explain:

Discussions have occurred between a few interested parties (the County and the local Regional Conservation District).

Describe what impacts, if any, will occur if the Project/Program is not implemented:

A groundwater-flow model for the Paso Robles Groundwater Basin is currently being updated. The original model did not discuss simulating subsidence, suggesting that the subsidence package was not used. Without the package to simulate subsidence, this updated model will be ineffective in assessing the proposed groundwater banking scenarios and future water conditions. The areal extent of land-surface subsidence and associated groundwater-storage changes cannot be adequately modeled without the data needed to calibrate the subsidence package. The subsidence package simulates land-surface subsidence, allows for surface and subsurface processes to be linked to land subsidence, and splits out elastic and inelastic compaction which improves calibration of critical heads to better delineate the two types of compaction.

Other Comments:

Feasibility Study for Recycled Water for Agricultural Use

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **Coastal San Luis Resource Conservation District**

Contact Name: **G.W. Bates**

Affiliation: **Coastal San Luis Resource Conservation District**

Address: **645 Main Street, Suite F, Morro Bay, CA 93442** Phone Number: **805-772-4391**

Email: **gbates@coastalRCD.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

This project is intended to study the feasibility of recycling wastewater for agricultural re-use within the Coastal San Luis Resource Conservation District. The study will examine the opportunities for using recycled water from five wastewater treatment plants including: The City of San Luis Obispo, The City of Pismo Beach, South County Sanitation District, The City of Morro Bay, and the Nipomo Community Services District. The project will include the following components:

1. Assessment of cost and feasibility for producing agricultural quality recycled water at each plant.
2. Assessment of alternatives and costs for distributing recycled water to agricultural users.
3. Basement of potential environmental and agricultural impacts of recycled water use.
4. Development of an advisory committee consisting of farmers in the district.
5. Assessment of permit requirements and potential funding sources. The project will expand on existing planning efforts.

Describe Need for Project/Program (1 to 2 sentences):

Agricultural water use accounts for a large portion of all the water used in the County. Using recycled water for agriculture can reduce groundwater pumping and help conserve the existing supply for domestic use.

Project Website (if any):

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address:

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban and Agricultural**

Watershed (if known) See Map: **Multiple watersheds in the Coastal San Luis Resource Conservation District**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Conceptual**

Describe status of permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

NA

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources:

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes. The proposed project will evaluate the potential for using recycled water for agriculture.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes. The proposed project will lay the groundwork for increased sustainability and improved water supply management.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes. This project will study the feasibility of transferring wastewater to agricultural areas.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes. This project will study the feasibility of wastewater for agricultural use thus making higher quality water available for other uses.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

No.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. Agricultural water is primarily pumped from aquifers. Using recycled water for agricultural irrigation will reduce the amount of groundwater pumped for agricultural use.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. A major component of this project is outreach aimed at understanding the needs and concerns of the agricultural community with respect to recycled water use.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

This project will involve partnerships with the cities and agencies that treat wastewater within the Coastal San Luis Resource Conservation District.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Failure to utilize recycled water effectively will result in continued waste of this resource and continued reliance on groundwater for agricultural use.

Other Comments:

Flood Control Zone 3 - Lopez WTP Sludge Bed 1 & 2 Upgrades

South County

Sponsoring Agency/Organization: **San Luis Obispo County Flood Control & Water Conservation District**

Contact Name: **Jeff Lee**

Affiliation: **San Luis Obispo County Flood Control & Water Conservation District**

Address: **1050 Monterey Street, Room 206, San Luis Obispo, CA 93408** Phone Number: **805-781-1043**

Email: **jlee@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The project consists of replacement of existing structures, piping and installation of an impermeable liner for Sludge Bed No. 1 and No. 2 at the Lopez Water Treatment Plant, improving sludge drying efficiency at the plant.

Describe Need for Project/Program (1 to 2 sentences):

The project will increase the sludge drying efficiency at the Lopez Water Treatment Plant. The sludge beds do not currently have an impermeable liner to keep groundwater and water from Bed No. 2 from seeping into its sludge, which greatly increases sludge drying times.

Project Website (if any):

http:__www.slocountywater.org

Subregion (See Map) **South County**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **2485 Lopez Drive, Arroyo Grande, CA**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Industrial**

Watershed (if known) See Map: **Five Cities Watershed**

Project Cost Range: **$250K-$500K**

Project Cost (if known): **$325,000**

Source of Cost Estimate: **Agency**

Project Status: **Planning Phase**

Describe status of permitting: **Project is in planning phase**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Technical studies complete, preliminary design underway to allow final CEQA document to be prepared. CEQA estimated to be completed in July 2015.

Estimated ProjectStart Date: **7/1/2016**

Estimated ProjectEnd Date: **6/30/2018**

Identify proposed funding sources: **Flood Control Zone 3 District, Grant**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes, the project improves water use efficiency and system reliability.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes, the project improves sustainability of the water supply.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes. project increases the operating efficiency of the sludge drying beds.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. increased operating efficiency of the sludge drying beds will lead to environmental benefits.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

No

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local

control, etc.)?

No

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The project is being undertaken by Flood Control Zone 3 (Lopez Project). The District will provide project management coordination, environmental review and permitting activities in coodination with the FCZ Advisory Committee. The Lopez WTP, where the membrane rack addition project is located, treats and provides water for the San Luis Obispo County's Flood Control Zone 3, which includes the Cities of Arroyo Grande, Grover Beach and Pismo Beach and the unincorporated areas of Oceano and CSA12 - Avila Beach.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the project is not implemented, the treatement plant would continue to operate under existing conditions. The project increases the sludge drying efficiency at the Plant which could lead to improved the ground water in the area.

Other Comments:

The Lopez WTP sludge drying operations will need to be evaluated prior to the implementation of the project. The project scope, schedule and cost are roughly estimated at this time based on a basic understanding of the project scope.

Floodplain and Riparian Enhancement Feasibility Plan for Arroyo Grande Creek

South County

Sponsoring Agency/Organization: **Coastal San Luis Resource Conservation District**

Contact Name: **Nicole Smith**

Affiliation: **Conservation Programs Manager**

Address: **645 Main St., Suite F, Morro Bay, CA 93442** Phone Number: **805-772-4391**

Email: **nsmith@coastalrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Maybe**

Provide a Brief Project/Program Description (1 to 2 sentences):

The Floodplain and Riparian Enhancement Feasibility Plan for Arroyo Grande Creek will guide implementation of floodplain projects at the watershed scale in order to reduce downstream flooding and sediment loads, encourage groundwater infiltration, and expand riparian_floodplain habitat. Building on recommendations and project locations of the Arroyo Grande Creek Erosion, Sedimentation, and Flooding Alternatives Study (2006), the Feasibility Plan will be the next step towards reducing flood risks along Arroyo Grande Creek Meadow Creek and Oceano lagoon. Tasks would include 1. Determine the feasibility of floodplain sediment capture projects identified in the Arroyo Grande Creek Erosion, Sedimentation, and Flooding Alternatives Study (2006),2.Produce floodplain designs for two (2) high priority floodplain projects, i.e. Carpenter Canyon and Los Berros parcels, 3Determine the feasibility of erosion control projects identified in Alternative Study, 4. Determine opportunities and constraints for flood easements, 5. Develop potential funding options and 6. Conduct workshops to discuss connections between floodplains, groundwater, stream flow and goals and outcomes of the Plans.

Describe Need for Project/Program (1 to 2 sentences):

The proposed Feasibility Plan will provide the next step towards reducing flood risks along Arroyo Grande Creek and Ocean lagoon through the implementation of erosion and floodplain projects that reduce sediment loads and subsequent loss of channel capacity, and retain and infiltrate flood waters.

Project Website (if any):

http:__www.coastalrcd.org_

Subregion (See Map) **South County**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **Properties adjacent to Arroyo Grande Creek and its tributaries, in the watershed**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **agriculture, rural residential, rural lands**

Watershed (if known) See Map: **Arroyo Grande Creek**

Project Cost Range: **$250K-$500K**

Project Cost (if known): **$450,000**

Source of Cost Estimate: **Engineer**

Project Status: **Conceptual**

Describe status of permitting: **no permitting is started.**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

N_A

Estimated ProjectStart Date: **7/6/1905**

Estimated ProjectEnd Date: **7/9/1905**

Identify proposed funding sources: **IRWM, DWR, in-kind and grants. If the project is accepted into the regional grant additional work can be completed to produce a line item budget and estimate contributions.**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

N_A

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

N_A

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

N_A

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program_ protect and improve source water quality_

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Purchase, preserve, enhance, and restore land in ecologically sensitive ecosystems_ manage stream flows to fish bearing streams, support a region-wide fish passage barrier prevention and removal program, and

implement fish friendly stream and river corridor restoration projects_ conserve natural resources

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Identify areas of known or expected conflicts and target stakeholders on specific actions thatthey should take to help protect groundwater basin quality and supply

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan_ - watershed management, flood risk management, education and outreach the Regional Water Quality Control Board (RWQCB) region or subdivision_ or other region or sub-region specifically identified by DWR. Effectively integrate water management with land use planning_ distinguish the root cause of flooding problems stemming from new development, existing development, and mandatory regulation_ integrate ecosystem enhancement, drainage control, and natural recharge into development projects.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

N_A

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

N_A

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Improved floodplain management would increase infiltration and could improve reliability of creek adjacent water supply wells and improve habitat health for sensitive species like steelhead trout.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Maybe

If yes or maybe, please explain:

Primary partner would be creek adjacent landowners

Describe what impacts, if any, will occur if the Project/Program is not implemented:

The project is closely tied to downstream efforts in the San Luis Obispo County Flood Control Channel, Zone 1_1A to improve flood protection with the construction of an overflow channel designed to encourage sediment movement and maintain tree canopy for habitat. The proposed project would determine feasible locations for restoring floodplains in order to capture sediment and attentuate floodwaters. When

implemented these outcomes may reduce maintenance costs for sediment removal and reduce flood waters reaching the Zone 1_1A channel. If not implemented, flood and erosion issues in the watershed will not be addressed at_near the source but instead at the end-of-pipe or in this case at the end bottom of the watershed.

Other Comments:

Groundwater Monitoring Program and Modeling Program for the Paso Robles Groundwater Basin

North County

Sponsoring Agency/Organization: **Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS) (predecessor to future California Water District)**

Contact Name: **Jerry Reaugh, Board President**

Affiliation: **Paso Robles Agriculture Alliance for Groundwater Solutions**

Address: **P. O. Box 1499, Paso Robles, CA 93447** Phone Number: **(805) 440-7300**

Email: **jerry@reaughj.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The County has a groundwater monitoring program throughout the County, but the utilization of the data on a regular basis to understand they dynamics of the Paso Robles Groundwater Basin occurrs sporadically. Furthermore, the monitoring program is conducted by measuring water in active wells. There is a need for installing monitoring wells within the basin at locations where there are data gaps. The groundwater model that the County is currently having develolped should be utilized each year to make predictions and monitor the performance of the Paso Robles Groundwater Basin.

Describe Need for Project/Program (1 to 2 sentences):

Monitoring wells need to be installed within the Paso Robles Groundwater Basin. The County's groundwater model needs to be utilized on a regular basis to understand the performance of the entire hydrology of the Basin.

Project Website (if any):

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **North County of San Luis Obispo overlying the Paso Robles Groundwater Basin**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban, Agricultural, Rural Residential**

Watershed (if known) See Map: **Salinas, Creston, Shandon**

Project Cost Range: **>$5M**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Conceptual**

Describe status of permitting: **n_a**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

n_a

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **Grants and Bonds**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

No

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes - the monitoring and modeling will provide information on what infrastructure might be necessary to improve the health of the Paso Robles Groundwater Basin.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes - the monitoring and modeling will provide information on water quality of the Paso Robles Groundwater Basin.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

No

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes - the monitoring and modeling will give all stakeholders and understanding of the Basin's performance, and provide a means to justify the water balance hydrology of the Basin

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes - too often the stakeholder's understanding of the performance of the Basin is complicated, and the on-going modeling of the basin will improve this understanding and improve collaboration between communities, agricultural, and rural residents

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

There are several water purveyors over the Basin who will likely be partners in the project, including but not limited to, City of Paso Robles, Atascadero Mutual Water Company, CSD's of Templeton, San Miguel and Ground Squirrel Hollow, Green River Mutual Water Company, Shandon CSA, and Creston Advisory Board.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

The situation that is occurring in the Basin this year with wells going dry likely could have been predicted well in advance of the crisis had the Basin modeling been ongoing each year, and furture crisis issues will contrinue to occur if the basin is not properly managed and monitored.

Other Comments:

Irrigation Distribution System at Paso Robles Airport Area

North County

Sponsoring Agency/Organization: **Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS) (predecessor to future California Water District)**

Contact Name: **Jerry Reaugh, Board President**

Affiliation: **Paso Robles Agriculture Alliance for Groundwater Solutions**

Address: **P. O. Box 1499, Paso Robles, CA 93447** Phone Number: **(805) 440-7300**

Email: **jerry@reaughj.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The first phase of the irrigation distribution system will be installed to distribute water from the Nacimiento Water Project to the area north of Paso Robles in the vicinity of the airport that is experiencing significant declines in the groundwater elevations. Future phases of this system will include off-stream reservoir storage and connection to the Paso Robles wastewater treatment plant once teritary treatement process has been implemented.

Describe Need for Project/Program (1 to 2 sentences):

The immediate need for this project is (1) the formation of a California Water District, (2) a Nacimiento Water Delivery Entitlement Contract with the San Luis Obispo County Flood Control and Water Conservation District for the remaining Reserve Water of about 6,095 acre-feet per year, and (3) capital to permit, design, and construct the distribution system to convey the Nacimiento Water to the region to stabilize and_or improve the groundwater elevations via in-lieu recharge.

Project Website (if any):

http:__www.praags.org_

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **Wellsona Road, Airport Road, and Buena Vista Road**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban, Agricultural, Rural Residential, Golf Courses**

Watershed (if known) See Map: **Salinas River**

Project Cost Range: **>$5M**

Project Cost (if known): **$21,500,000**

Source of Cost Estimate: **Engineer**

Project Status: **Conceptual**

Describe status of permitting: **Not started**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Not Started

Estimated ProjectStart Date: **7/1/2014**

Estimated ProjectEnd Date: **12/31/2016**

Identify proposed funding sources: **Bonds, Ag Grants**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **San Miguel**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

The project will recharge the Paso Robles Groundwater via in-lieu recharge by using Nacimiento Water Project water for irrigation. The Participants in the Nacimiento Water Project can bank some of their Nacimiento Water Project entitlement in the local groundwater. Futue phases of the project includes an off-stream reservoir in the vicinity for the storage of Nacimiento Water during times when demand is low, thus allowing for the San Luis Obispo County Flood Control and Water Conservation District's entitlement to be stored within the boundaries of the District rather than lost down the Salinas River to Monterey County_ therefore improving the water use efficiency of the water supply. A recreation benefit can be realized with this off-stream storage.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

This project will maximize the accessibility to an existing water supply, the Nacimiento Water Project. The County has rights to 17,500 acre-feet per year from Lake Nacimiento divided into lakeside use (1,750 AFY) and 15,750 AFY for distribution via the Nacimiento Water Project (NWP). The water rights to lake water is by contract dated October 17, 1959, between Monterey and San Luis Obipso County. The NWP was commissioned for operation on Feb 1, 2011, and to-date has not conveyed the entire entitlement. The proposed irrigation distribution project will maximize the NWP's conveyance of lake water. The water applied to the irrigated lands from the NWP will improve the salt nutrient applied to the land because the NWP water is lower in disolved salts than the pumped groundwater. The local stakholders in the region include irrigated agriculture, rural residents, the City of Paso Robles, and golf courses. All stakeholders will benefit as the groundwater elevation will stablize and_or improve over time.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The project will improve the sustainability of the groundwater supply during a drought by delivering irrigation water form the surface supply of the Nacimiento Reservoir. A 2004 study by Boyle Engineering describes Nacimiento Reservoir supply to be a highly reliability local source of water to San Luis Obispo. The hydraulic capacity of the irrigation distribution pipes can be sized to maximize the benefical uses in the region, for example, to apply surface water into the region for irrigation and off-stream storage, and reverse the flow to supply water to participating agencies who participate in banking within the

groundwater basin.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

The demand on groundwater supplies in this region will be reduced, and thus the groundwater quality will improve and_or stabilize, especially in the resistance of the deeper geothermal waters from entering into the Paso Robles Basin. The application of the Nacimiento water for irrigation will contain less dissolved salts than the groundwater supply, which improves the regions salt nutrient loads.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

A future phase of the project will be the construction of an off-stream reservoir to hold Nacimiento water during period of time when irrigation demand is low. This off-stream reservoir will be an earthen strurture located over the groundwater basin and will provide direct recharge to the basin. The reservoir can be multi-purpose to support recrecation activities (canoeing, kayaking, etc.). The entire irrigation system, once constructed, will serve as a functioning outdoor classroom for field trips to educate students on the importance of developing multifaceted water resource projects.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

The project greatly improves the management of the groundwater resources in the Paso Robles basin. The project will stablize and_or improve groundwater elevations via in-lieu recharge using surface supplies for irrigation and reducing the demands on the groundwater supplies. Participants in the Nacimiento Water Project can bank water in the region. The goal of the project is to reduce the threat of overdrafting the Paso Robles Groundwater Basin in this localized area, which in recent years has experienced these threats.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

This project will be utilized as a fully functioning educational tool for school field trips, the annual agricultural tour, political and civic organizations, and other state agencies, to demonstrate the multi-faceted management and utilization of water resources to the benefit of all sources and users. The combined efforts of blending surface and groundwater supplies improves the reliability and water quality of the groundwater resource. The implementation of the infrastructure advances the opportunity to bank water for the local water purveyors. All of these water resources are controlled by local stakeholders.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater

treatment)?

San Miguel should be helped by this project because the objective is to fill the 'cone of depression' in the groundwater which will eventually increase the groundwater levels in the San Miguel area.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No - future projects by the new California Water District will look for solar opportunities and hydroelectric energy recovery opportunities.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Maybe

If yes or maybe, please explain:

Potential partners (outreach to these has not occurred yet because the formation of this new California Water District is at its infancy) include: City of Paso Robles for banking their Nacimiento entitlement, funding the tertiary process of their wastewater treatment plant, and distributing their tertiary treated recycled water_ the Participants in the Nacimiento Water Project for banking their water entitlement_ the San Luis Obispo County Flood Control and Water Conservation District for the banking and_or carryover storage of Nacimento Water Supplies in the County.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Groundwater levels will decline. Groundwater quality will degrade. Socioeconomic impacts will impact the county without a reliable supply of irrigation water.

Other Comments:

LID Pilot Program

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)**

Contact Name: **Laura Edwards**

Affiliation: **Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)**

Address: **65 South Main Street, Suite 107, Templeton, CA 93465** Phone Number: **805-434-0396 x 5**

Email: **laura@us-ltrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Conduct multiple low impact development retrofit installments using a cost-shared rebate program. Work directly with local community members to install public and private projects to promote rainwater catchments.

Describe Need for Project/Program (1 to 2 sentences):

Drought has exacerbated water shortages in North San Luis Obispo County. Immediate programs are needed to enhance water retention. The LID program helps to slow, sink and spread rainwater more effectively and efficiently.

Project Website (if any):

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions: **North Coast & North County**

Nearest Cross Street or Street Address: **Multiple**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Rural & Urban Communities**

Watershed (if known) See Map: **Santa Rosa Creek & Salinas River. It also impacts additional watersheds.**

Project Cost Range: **<$250K**

Project Cost (if known): **$10,000**

Source of Cost Estimate: **Other**

Project Status: **Ready for Implementation**

Describe status of **Permits not required**

permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

CEQA exempt

Estimated ProjectStart Date: **6/1/2014**

Estimated ProjectEnd Date: **6/30/2015**

Identify proposed funding sources: **Grants, landowner cost share, NRCS**

What is the Percent Range of Matching Funds? **26%-50%**

Does Project Serve a Disadvantaged Community (DAC)? **San Simeon**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes. Stormwater management will be optimized to retain water.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes. Urban and rural users will be able to use rainwater that is held with LID catchment devices.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes. Rainwater system retrofits will enhance water supplies and provide drought preparadness education.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes. LID sinks, slows and spreads rainwater which helps filter out pollutants and slows velocity to control temperature.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. Expands resource stewardship and public education.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. Encourages recharge to groundwater via improved percolation and catchment systems.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Yes. LID has multiple beneficial flood management components.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. The program uses public outreach via LID demonstration projects.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes. Public education will be emphasized in disadvantaged communities.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes. Water supply improvement and flood management address climate change concerns.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

Describe what impacts, if any, will occur if the Project/Program is not implemented:

LID will likely not be used much since people still do not understand its function or purpose.

Other Comments:

The project cost estimate provided is only for one project. There are multiple projects, up to $10,000 per project

Lopez Lake Spillway Raise Project

South County

Sponsoring Agency/Organization: **Zone 3 Agencies (Cities of Arroyo Grande, Grover Beach and Pismo Beach, Oceano Community Services District and County Service Area 12)**

Contact Name: **Ben Fine**

Affiliation: **City of Pismo Beach**

Address: **760 Mattie Rd Pismo Beach, CA 93449** Phone Number: **(805) 773-4656**

Email: **bfine@pismobeach.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

This project will include design and construction of inflatable rubber dam spillway gate_permanent spillway raise at the Lopez dam to raise the height of the dam, expand storage capacity and increase the safe yield of the Lopez Reservoir.

Describe Need for Project/Program (1 to 2 sentences):

Maintaining a diversified water supply portfolio is essential to enable a public utility to reliably supply water to its customers. Expanding the storage capacity of the Lopez Reservoir would provide the South County Sub-Region with increased water supply reliability and decrease dependence upon water from the State Water Project and Santa Maria Groundwater Basin.

Project Website (if any):

Subregion (See Map) **South County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **Lopez Reservoir**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban, Ag, Rural, Etc.**

Watershed (if known) See Map: **5 Cities**

Project Cost Range: **>$5M**

Project Cost (if known): **$1,500,000**

Source of Cost Estimate: **Engineer**

Project Status: **Planning Phase**

Describe status of permitting: **Pending**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Pending

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **Not Available**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

This project would provide additional local surface water supply (500 -1,000 AFY) to the South County Sub-region for a variety of potential uses (e.g. urban, agriculture, rural, environmental, etc.).

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

This project would improve the storage capacity of Lopez Reservoir and enable the capture of additional water during high rainfall years. The additional storage would allow for the safe yield of the reservoir to be increased without causing the lake to drop below the minimum pool level.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Increasing the storage and yield from Lopez Reservoir will provide the Zone 3 agencies with the flexibility to reduce dependence upon State Water Project and water pumped from the Santa Maria Groundwater Basin. Water from Lopez Reservoir is not vulnerable to seawater intrusion and reduced deliveries caused by environmental issues in the Sacramento_San Joaquin Delta.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

The availability of additional surface water will allow the Zone 3 agencies to reduce groundwater pumping and thus help avoid future occurrences of seawater intrusion in the Santa Maria Groundwater Basin. It would also provide additional surface water that could be released to Arroyo Grande Creek for agriculture irrigation and groundwater recharge.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Increasing the storage in Lopez Reservoir would provide additional flexibility to manage environmental releases to Arroyo Grande Creek. It would also reduce the reliance on imported State Water Project water, which requires significant pumping to deliver from the Sacramento_San Joaquin Delta to San Luis Obispo County.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Providing additional surface water supply for the Northern Cities Management Area (NCMA) agencies overlying the Santa Maria Groundwater Basin will allow for improved conjunctive use of these agencies' surface and groundwater supplies. During periods of decreased groundwater recharge, agencies could utilize surface water supplies and limit pumping to avoid conditions within the groundwater basin that could lead to seawater intrusion. Additionally, during periods of high groundwater storage, these agencies could utilize their groundwater supplies and reduce surface water imports.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Increasing the height of the spillway would reduce the frequency and magnitude of spills occurring from the Lopez Reservoir. This will result in lower peak flows in Arroyo Grande Creek and reduced flood risk. Installation of an inflatable spillway gate atop the spillway would provide additional flexibility for controlling releases from Lopez Reservoir.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Implementation of this project will include coordination amongst the urban, agriculture, environmental, and rural stakeholders in and around Lopez Reservoir and Arroyo Grande Creek. This project will also be coordinated with the development of the Habitat Conservation Plan for the existing Lopez Reservoir.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

This project will provide additional surface water for the community of Oceano. Additionally, it will enable all of the Northern Cities Management Area agencies to reduce groundwater pumping and improve the health of the Santa Maria Groundwater Basin, one of Oceano's sources of supply.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Obtaining additional local surface water will reduce the need to import water from the State Water Project, which requires significant amounts of energy and consequently generates significant greenhouse gases emissions. Water from Lopez Reservoir is delivered via gravity from the reservoir to the Zone 3 agencies and also includes the potential for hydropower generation.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Increased yield from the Lopez Reservoir by the Zone 3 agencies will reduce overall demands on the Santa Maria Groundwater Basin and will help all of the agencies within the basin.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If not implemented, the Zone 3 and NCMA agencies will continue to rely upon their current groundwater and surface water supplies. However, these water supply resources are not 100% reliable: the Santa Maria Groundwater Basin has the potential to be impacted by seawater intrusion_ and the availability of State Water Project water is dependent upon hydrologic conditions throughout the state and environmental conditions within the Sacramento_San Joaquin Delta.

Other Comments:

Lopez Pipeline Improvements

South County

Sponsoring Agency/Organization: **Northern Cities Management Area (NCMA) Agencies: Oceano Community Services District (OCSD)_ City of Arroyo Grande_ City of Grover Beach_ City of Pismo Beach**

Contact Name: **Greg Ray**

Affiliation: **Grover Beach Director of Public Works_City Engineer**

Address: **154 S. Eight Street, Grover Beach, CA 93433** Phone Number: **(805) 473-4535**

Email: **gray@grover.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The Lopez Pipeline Improvement project encompasses the following projects to increase the capacity of the Lopez pipeline and improve water supply reliability to the South County Sub-Region: the 33' pipeline pigging project_ a pigging evaluation and updated capacity assessment_ and design and construction of pipeline improvements. This project will work in conjunction with the San Luis Obispo County Flood Control & Water Conservation District's project to install additional membranes at the Lopez Water Treatment Plant to increase the overall capacity of the Lopez Project and to improve the water supply reliability for Southern San Luis Obispo County.

Describe Need for Project/Program (1 to 2 sentences):

The current condition of the Lopez pipeline does not provide sufficient delivery capacity to allow the Zone 3 agencies to meet their peak demands with available surface water. Because of this capacity limitation, these agencies pump groundwater, even when they have excess surface water entitlements and allocations available to them.

Project Website (if any):

Subregion (See Map) **South County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **Zone 3-San Luis Obispo County**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Multiple**

Watershed (if known) See Map: **5 Cities**

Project Cost Range: **$1M-$5M**

Project Cost (if known): **$3,400,000**

Source of Cost Estimate: **Engineer**

Project Status: **Planning Phase**

Describe status of permitting: **Pending**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Pending

Estimated ProjectStart Date: **10/1/2013**

Estimated ProjectEnd Date: **11/1/2017**

Identify proposed funding sources: **Zone 3 CIP Budget and Zone 3 Agencies**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

This project is part of a larger program to improve the capacity of the Zone 3 storage, treatment and water distribution systems. The entire program includes upgrades to the Lopez Water Treatment Plant (WTP), the Lopez Pipeline and the potential expansion of the Lopez Reservoir through the Lopez Lake Spillway Raise Project. The Lopez Lake Spillway Raise Project will increase the yield and the WTP and pipeline projects will improve the operational flexibility of the Lopez Project.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

This project is designed to increase the delivery capacity of the Lopez Pipeline and will improve the ability of the pipeline to deliver water to the Zone 3 agencies. Currently during the summer months, the capacity of the Lopez Pipeline limits the Zone 3 agencies ability to deliver sufficient water to meet the peak demands and forces these agencies to pump groundwater. With improved pipeline capacity, these agencies will be able to reduce their groundwater pumping and utilize additional surface water supplies.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The Lopez Pipeline Improvements Project will enable the Zone 3 agencies to deliver additional surface water supplies and minimize groundwater pumping within the Santa Maria Groundwater Basin (SMGB).

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Increasing the capacity of the Lopez Pipeline will provide for additional opportunities for the Zone 3 agencies to blend their surface water and groundwater supplies. Historically, some of the Zone 3 agencies' wells have been high in nitrates and have required treatment or blending to ensure that water delivered to their customers does not exceed the California Department of Public Health's Maximum Contaminant Levels.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Improving the capacity of the Lopez Pipeline will enable the Zone 3 agencies to increase surface water deliveries and thus reduce groundwater pumping to help prevent future occurrences of seawater intrusion. Currently, the hydraulic grade lines of the City of Grover Beach and the OCSD' s distribution systems limit the capacity of these agencies' turnouts and the overall capacity of the Lopez pipeline. Improving the capacity of the Lopez Pipeline will allow Grover Beach and OCSD to increase their turnout capacity, reduce groundwater pumping, and also improve the delivery capacity for all of the other agencies on the Lopez pipeline.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Increasing the capacity of the Lopez Pipeline will allow the Zone 3 agencies to increase the drawdown rate to help prevent uncontrolled spills from Lopez Reservoir. This will enable the Zone 3 agencies to reduce the frequency and the magnitude of spills to Arroyo Grande Creek.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Implementation of the Lopez Pipeline Improvements Project will require coordination and collaboration amongst the Zone 3 agencies to evaluate and identify the pipeline improvements that provide the greatest benefit to residents of the South County Sub-Region. These benefits will both be direct, in the form additional surface water deliver capacity and indirect, in the form of reduced groundwater pumping within the SMGB, reduced seawater intrusion risks and increased water supply reliability.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Oceano is a DAC and is a participating agency in this Project. Oceano's DAC status allows for increased flexibility on DWR's requirements for an implementation project. DACs are eligible to submit projects that need additional study to determine the most effective construction project to address their needs. This project's second phase includes a capacity evaluation that will be used to determine the most efficient improvement for increasing the capacity of the Lopez pipeline and increasing deliveries to Oceano and the other Zone 3 agencies.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

One of the key components of this project includes an evaluation of the Lopez pipeline and the development of preferred alternative improvements. These alternatives will take into account life cycle costs and will balance increased capacity with increased energy costs and greenhouse emissions.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The following agencies have participated and will be key stakeholders in the completion of the Lopez Pipeline Improvements Project: San Luis Obispo County Flood Control District (District)_ San Luis Obispo County Flood Control District-Zone 3 Technical Advisory Committee (Zone 3 TAC)_ Oceano Community Services District_ City of Arroyo Grande_ City of Grover Beach_ City of Pismo Beach_ and County Service Area 12

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If this project is not implemented, then the ability of the Zone 3 agencies to deliver surplus surface water will remain limited and require the continued pumping of water from the SMGB. This continued pumping, during periods of drought, will contribute to decreased groundwater levels and the potential for seawater intrusion in Southern San Luis Obispo County.

Other Comments:

The project cost estimate provided above is conservative. The cost ranges from $2,200,000 to $3,400,000.

Lopez Water Project Habitat Conservation Plan

South County

Sponsoring Agency/Organization: **San Luis Obispo County Flood Control and Water Conservation District**

Contact Name: **Mark Hutchinson**

Affiliation: **San Luis Obispo County Flood Control & Water Conservation District**

Address: **1050 Monterey Street, Room 206, San Luis Obispo, CA 93408** Phone Number: **805-781-5458**

Email: **mhutchinson@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The development of a Habitat Conservation Plan (HCP) for the Lopez Water Project will optimize Lopez Reservoir operations to balance municipal water supply, release of water for ecosystem preservation, and use by riparian land owners. Implementation of these elements of the Lopez HCP will improve flows for fisheries and other beneficial uses.

Describe Need for Project/Program (1 to 2 sentences):

It is the desire of the San Luis Obispo County Flood Control and Water Conservation District (District) to continue meeting its municipal water supply contracts. The need for the HCP is two-fold_ 1) acquire 'take permits' to authorize operation of the Lopez water project under the Federal Endangered Species Act and 2) The State Water Resources Control Board has directed the District to revise its water rights permit, a condition of which is to develop a HCP.

Project Website (if any):

Subregion (See Map) **South County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **2485 Lopez Drive, Arroyo Grande, CA**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Industrial**

Watershed (if known) See Map: **Five cities Watershed**

Project Cost Range: **$1M-$5M**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Ready for Implementation**

Describe status of permitting: **Pending submittal to federal resource agencies**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

EIR anticipated_ to begin in 12-24 months.

Estimated ProjectStart Date: **1/1/2018**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **project is currently funded via Zone 3 of the District**

What is the Percent Range of Matching Funds? **>51%**

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes, completion and approval of the HCP is a condition of revising our water rights permit with the State Water Resources Control Board. Revising our water rights permit for Lopez reservoir allows for optimization of water storage for drought or emergency purposes as well as water supply management of our municipal contracts. The HCP takes into account existing downstream riparian rights most of which is used by large agricultural properties.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Indirectly through the revision of the water rights permit for Lopez reservoir, the ability to store additional water for drought purposes may be an outcome.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

No

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

The HCP will identify a downstream release program that will benefit federally listed species such as Steelhead and California red-legged frogs through river_stream flow management.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring,

banking/recharge, etc.)?

N_A

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. The project will develop and implement water use collaberation among municipal, agriclutural, and environmental interests

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Indirectly the DAC of Oceano contracts with the District for a portion of their municipal water.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The development of the HCP is a collaborative process working with both National Marine Fisheries and State Fish and Wildlife

Describe what impacts, if any, will occur if the Project/Program is not implemented:

The Disitrct is obligated to develop an HCP to support both a federal Incidental Take Permit and a revised State Water Rights permit. If the HCP is not completed, the Lopez Water Project will not be able to operate under federal or state law.

Other Comments:

Lopez Water Treatment Plant Membrane Rack Addition

South County

Sponsoring Agency/Organization: **San Luis Obispo County Flood Control and Water Conservation District**

Contact Name: **Eric Laurie**

Affiliation: **San Luis Obispo County Flood Control & Water Conservation District**

Address: **1050 Monterey Street, Room 206, San Luis Obispo, CA 93408** Phone Number: **805-788-2758**

Email: **elaurie@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The Lopez Water Treatment Plant (WTP) Membrane Rack Addition Project involves the installation of additional membrane filter modules in the existing five membrane filtration racks and the construction of a new sixth membrane filtration rack. Addition of the membrane filtration modules and the membrane filtration rack will increase the WTP's filtration capacity enabling it to distribute more water to Zone 3 Agencies (five communities) and to provide greater reliability.

Describe Need for Project/Program (1 to 2 sentences):

The current membrane filtration capacity of the Lopez WTP is not sufficient to provide Zone 3 agencies with their peak demands with available surface water. Because of this capacity limitation, these agencies pump groundwater, even when they have excess surface water entitlements and allocations available to them. Groundwater demands increase risk of saltwater intrusion and decrease availability of groundwater. Groundwater quality is also not as good as treated Lopez water. This project would enable the Lopez WTP to provide enough treated water to meet peak demands, thus, reducing groundwater pumping and improving water quality.The existing five membrane filter racks at the Lopez WTP require frequent and routine cleaning and maintenance, requiring certain racks to go 'off-line' for cleaning. Some cleaining requires two racks to be 'off-line' at the same time. During these types of cleaning and maintenance procedures, the Lopez WTP cannot produce peak contractural water allocation demands. The addition of membrane filter modules to the existing rack and an additonal membrane filtration rack would allow cleaning and maintenance to occur while producing peak contractural water allocation demands.

Project Website (if any):

www.slocountywater.org

Subregion (See Map) **South County**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **2485 Lopez Drive, Arroyo Grande, CA**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Industrial**

Watershed (if known) See Map: **Five Cities Watershed**

Project Cost Range: **$500K-$1M**

Project Cost (if known): **$650,000**

Source of Cost Estimate: **Contractor**

Project Status: **Planning Phase**

Describe status of permitting: **N_A_ project was contemplated and accounted for in the initial construction design, permit and construction**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Categorically Exempt_ the project was contemplated and accounted for in the original environmental document. Anticipated by 6_30_2014.

Estimated ProjectStart Date: **7/1/2013**

Estimated ProjectEnd Date: **6/30/2015**

Identify proposed funding sources: **IRWM Grant Funding_ existing Flood Control Zone 3 Agency Billings**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Project increases treatment and delivery capacity for the primary drinking water supply to the Zone 3 agencies. The project water supply benefits include an increased capacity to treat and deliver Lopez water to Zone 3 agencies. This increase would result in a subsequent reduction of groundwater pumping and delivery of State Water. Additional water delivery through installation and expansion of the membrane rack and filters would help reduce saltwater intrusion and improve the overall health of the ground water basin.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Project increases the amount of high quality treated water to the Zone 3 agencies. The project water supply benefits include an increased capacity to treat and deliver Lopez water to Zone 3 agencies. Additional water delivery through installation and expansion of the membrane rack and filters would help reduce saltwater intrusion and improve the overall health of the ground water basin. The project also provides reliability, enabling the Lopez WTP membrane filtration racks to undergo maintenance while still delivering water allocations, which cannot currently be done during peak demand periods.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The project also provides reliability, enabling the Lopez WTP membrane filtration racks to undergo maintenance while still delivering water allocations, which cannot currently be done during peak demand periods. This project will contribute to a sustainable and reliable water supply by providing flexibility in use of various water supply sources.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes, delivery of Lopez water is of higher water quality than the groundwater that would be pumped if system was off-line.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

The project supports and integrates the land use planning elements of the Zone 3 communities by enhancing the reliability and capacity of treated water that is produced at the Lopez WTP, thus, enabling communities to manage their water sources with greater flexiblility. This will provide greater support of existing and planned land uses within the Zone 3 communities.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Implementation of the project reduces demands on groundwater by providing a larger quantity of surface water which also helps fight seawater intrusion.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Project improvements are located inside an existing building so no additional stormwater runoff will be generated.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

This project has several partners, namely the end users of Lopez water that make this a multi-benefit project. This project could be combined with projects from any of the Zone 3 agencies to increase the capacity of their individual water distribution systems via pipeline upsizing, installation of pump stations or pipeline pigging.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

The Lopez WTP treats water for the Oceano community, which is classified as a disadvantaged community.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The Lopez WTP, where the membrane rack addition project is located, treats and provides water for the San Luis Obispo County's Flood Control Zone 3, which includes the Cities of Arroyo Grande, Grover Beach and Pismo Beach and the unincorporated areas of Oceano and CSA12 - Avila Beach. Lopez water is a primary water source for each of these communities and is part of their regional water supply program.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the project is not implemented, the treatement plant would continue to operate under existing conditions. The plant could possibly not be able to meet contractual water allocation demands during routine cleaning procedures that take two racks 'off-line' at the same time.

Other Comments:

This project will allow the communities to take more Lopez water and conserve other sources that may be affected by drought. Most of the communities relying on this water have State Water, Lopez water and groundwater in their water supply portfolio.

Los Osos Landfill Remediation - Pump and Treat

North Coast

Sponsoring Agency/Organization: **County of San Luis Obispo**

Contact Name: **Kari Graton**

Affiliation: **Project Manager**

Address: **1055 Monterey St, San Luis Obispo, CA 93407** Phone Number: **805-781-5239**

Email: **kmgraton@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

A conceptual design for an effective Pump and Treat system consists of strategically placed extraction wells, water storage tanks, a carbon filtration system, and a system of pipelines intended to collect and subsequently treat and dispose of the groundwater below and adjacent to the Los Osos landfill.

Describe Need for Project/Program (1 to 2 sentences):

The plume of contaminants from the Los Osos landfill extends beyond the 'point of compliance,' or the edge of the buried refuse. The current Corrective Action Work Plan based on intrinsic remediation has not resulted in reducing these contaminant levels down to the point of compliance. A study done in December 2011 concluded the most feasible way to accelerate this process was to develop and implement a Pump and Treat program.

Project Website (if any):

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **2285 Turri Road, San Luis Obispo CA 93405**

Land Use (e.g., urban, ag, rural residential etc.) See Map:

Watershed (if known) See Map:

Project Cost Range: **$500K-$1M**

Project Cost (if known): **$901,000**

Source of Cost Estimate: **Engineer**

Project Status: **Planning Phase**

Describe status of permitting: **Coastal Development (CDP) in application phase - (application scheduled for completion in Nov. 2013)**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Coastal CEQA exemption for test phase

Estimated ProjectStart Date: **7/5/1905**

Estimated ProjectEnd Date: **7/8/1905**

Identify proposed funding sources: **County of San Luis Obispo**

What is the Percent Range of Matching Funds? **<10%**

Does Project Serve a Disadvantaged Community (DAC)? **San Luis Obispo**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes. This Pump and Treat Project will improve existing water quality and remove VOCs from the groundwater below and adjacent to the Los Osos landfill, in order to meet regulations and compliances.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

No.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes. This project will improve water quality of the groundwater on-site, beyond the point of compliance, to meet drinking water standards.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

No.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. This project will provide groundwater remediation by managing a minor contaminant plume out of compliance with standards mandated by the Central Coast Regional Water Quality Control Board.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The County of San Luis Obispo has and will continue to work with the Regional Water Quality Control Board (RWQCB), the San Luis Obispo County Air Pollution Control District (SLO APCD) and the California Department of Resources and Recycling in these efforts to leave the landfill in a condition that would pass all state and county health laws, rules and regulations, concerning waste disposal sites.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

At a meeting in December of 2012, RWQCB staff advised County staff to move forward as soon as possible in constructing and initiating operations of a groundwater pump and treat facility at the landfill, or face enforcement action. In subsequent correspondence with County staff, RWQCB staff has noted that violations of the landfill Waste Discharge Requirements (WDR's) subjects the County to civil liability of up to $5,000 for each day the violation occurs per California Water Code section 13350(a)(2) and (e), which is attached (Exhibit "I").

Other Comments:

The project cost estimate breakdown is as follows:Capital: $631,000Annual O&M for first 3 years: $75,000 - $105,000_yr ($90,000 avg * 3 = $270,000)

Los Padres CCC Center - Stormwater LID Treatment Project

North Coast

Sponsoring Agency/Organization: **Morro Bay National Estuary Program**

Contact Name: **Adrienne Harris**

Affiliation: **Director - Morro Bay National Estuary Program**

Address: **601 Embarcadero, Morro Bay, CA 93442** Phone Number: **(805) 772-3834**

Email: **aharris@mbnep.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The project will be implemented over a 20 acre site that is located directly adjacent to Chorro Creek, the primary tributary to the Morro Bay Estuary that includes a robust steelhead population. The project will use LID methods to treat and inflitrate runoff from the imperivious and compacted surfaces by constructing on- contour and off-contour infiltration basins, rain gardens, native plantings, greywater systems, and mulch within the California Conservation Corps Center facility in San Luis Obispo County. The project will greatly reduce the transport of pollutants from the site into Chorro Creek and the Estuary, but will also help reduce hydro-modification impacts to Chorro Creek caused by the quick discharge of storm flows into the creek. The project could be broken down into a phased approach that would be linked together and customized to fit funding resources.

Describe Need for Project/Program (1 to 2 sentences):

The project site is located on a portion of Camp San Luis Obispo National Guard Base, which is an intensely developed area along the banks of Chorro Creek. Currently storm flows and associated pollutants from this 'urban' area are discharged directly and quickly to Chorro Creek where additional hydro-modifications impacts to the creek are evident. These impacts include high levels of nutrients, bacteria, pertoleum products, metals, and sediment that disrupt the habitat and life stages of steelhead in the stream, as well as aquatic and terrestrial organisms in the Morro Bay Estuary. In addition, this project will act as a pilot LID project that could be scaled up to include the entire Camp SLO National Guard Base in the future. This project will also be used as a demonstration project for the public due to the location, accessibility and the nature of the work.

Project Website (if any):

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions: **North Coast**

Nearest Cross Street or Street Address: **Madera Ln and O'Connor Way, San Luis Obispo**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Agriculture, Urban, Open Space**

Watershed (if known) See Map: **Chorro Creek - Morro Bay**

Project Cost Range: **$500K-$1M**

Project Cost (if known):

Source of Cost Estimate: **Contractor**

Project Status: **Design Phase**

Describe status of permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Estimated ProjectStart Date: **6/1/2014**

Estimated ProjectEnd Date: **12/31/2016**

Identify proposed funding sources: **CCC, National Guard, NOAA, MBNEP, Private Foundations or other Non-Profits**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes, the project conserve and infiltrate stormwater on site, recharge groundwater and improve baseflow conditions in Chorro Creek.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes since the project will treat and infiltrate stormwater on site this will improve quality and quantity of water for groundwater recharge and base flow in Chorro Creek.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes the project is using LID methods which will improve water quality and uses stormwater as an irrigation source for nearby plants, as well as recharging GW for other beneficial uses.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes the project will reduce pollutants and associated hydro-modification impacts to aquatic and terrestrial species in Chorro Creek and the Morro Bay Estuary. In addition the project provides an excellent opportunity to improve environmental education resources to CCC corpmembers. The CCC Los Padres

Center is a residential facility that houses up to 80 corpsmembers. Implementing projects on this property will help develop the necessary conservation and environmental awareness among the corpsmembers that will help encourage different behaviors, lifestyle changes, and attitudes into their way-of-life. The project location also provides the opportunity to expand this environmental education into the National Guard members if it's scaled up to include the entire Camp SLO Base.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes the project will increase recharge of GW using LID methods.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Yes the project will improve Flood management by implementing LID metods on 20 acres near Chorro Creek. This will help improve water quality to the Creek, but also reduce current hydro-modification impacts to the creek.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes the project will directly educate CCC corpmembers, but will also act as a demonstration project for Camp SLO National Guard Base, nearby Cuesta Community College, and other interested entities.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

None

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The project is a partnership between the National Guard, the Morro Bay National Estuary Program and the California Conservation Corps

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Continued water quality and hydro-modification impacts to Chorro Creek, steelhead habitat, and Morro Bay National Estuary Habitats.

Other Comments:

Mapping the saltwater_freshwater interface in southern San Luis Obispo and northern Santa Barbara County, California

South County

Sponsoring Agency/Organization:

Contact Name: **Jill Densmore**

Affiliation: **USGS**

Address: **3130 Skyway Blvd, Ste 602, Santa Maria, CA and 6000 J St, Sacramento, CA**

Phone Number: **805-878-6201**

Email: **jidensmore@usgs.gov**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Map the saltwater_freshwater interface to 1) delineate where and at what depths saltwater is encounterd, 2) determine if current monitoring is adequate, 3) help identify best locations for additional monitoring wells, as needed, and 4) provide data for the Santa Maria Basin characterization study and groundwater-flow model.

Describe Need for Project/Program (1 to 2 sentences):

Previous studies have not delineated the extent of saltwater intrusion and have only approximated the distance and depth at which saltwater intrusion may be occurring. Because water levels in key wells in the Nipomo Mesa and Oceano areas have declined to 1975 levels and are below sea level in some areas, local groundwater resources are vulnerable to saltwater instrusion and protection_mitigation needs to be identified.

Project Website (if any):

Subregion (See Map) **South County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **approximately West side of Highway 1 from Pismo Beach to Guadalupe**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **urban, agricultural, rural residential, recreational**

Watershed (if known) See Map: **Five Cities, Nipomo Mesa, and Santa Maria Valley**

Project Cost Range: **$250K-$500K**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Conceptual**

Describe status of
permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources:

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

na

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

The project will aid in the management and sustainability of groundwater resources by delineating the location and depth of the saltwater_freshwater interface. Knowing the location and depth of this interface will help to target a focused application of resources and monitoring activities. Data provided by this project will help County personnel determine if management goals are being met and test water-management strategies where groundwater-flow models exist.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

na

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

This project will aid in the prevention of saltwater intrusion by mapping the location of the saltwater_freshwater interface. Repeat surveys can be conducted to help monitor vulnerable areas where monitoring wells are not located.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

This project will aid in expanding resource stewardship between the water users in the South County by identifying vulnerable areas.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

The project will improve groundwater management by 1) providing a better understanding of the groundwater basin and 2) helping to determine if current groundwater-management practices are effective or if they are in need of a more proactive approach.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

na

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

The project will help improve water-resources management and outreach by identifying the location of areas most vulnerable to saltwater intrusion. It is hoped that this project may encourage an environment of cooperation between the water users that share this limited resource.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

The project area includes Oceano, a disadvantaged community.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

na

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Maybe

If yes or maybe, please explain:

Because the proposed study area covers the coastline of South County (Southern San Luis Obispo County) and the Santa Maria Valley (Northern Santa Barbara County), it would be beneficial to have partnerships with both counties.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Currently, water levels in key wells in the Nipomo Mesa and Oceano areas have declined to 1975 levels and are below sea level in some areas as a result of declining recharge from precipitation and continued groundwater pumping. Previous studies have not delineated the extent of saltwater intrusion and have only approximated the distance and depth at which saltwater intrusion may be occurring. Currently, only 7 sites along the coast are being monitored for saltwater intrusion to the groundwater resources the coastal communities of Pismo Beach, Grover Beach, Oceano, Arroyo Grande, Nipomo, and Guadalupe. To assess the vulnerability to the water supply of these communities, the location and depth of the saltwater_freshwater interface needs to be mapped to provide water use decision-makers with the science-based data needed to protect this valuable resource. The data from this study are needed for the characterization and groundwater-flow model of the Santa Maria Basin. Without this data, water-resource management of this basin by the basin characterization and groundwater-flow model will be ineffective in evaluting and

ultimately protecting the water supply.

Other Comments:

Meadow Creek Flood Reduction

South County

Sponsoring Agency/Organization: **Coastal San Luis Resource Conservation District**

Contact Name: **G.W. Bates**

Affiliation: **Coastal San Luis Resource Conservation District**

Address: **645 Main Street, Suite F, Morro Bay, CA 93442** Phone Number: **805-772-4391**

Email: **gbates@coastalRCD.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

This project is intended to reduce flooding in Meadow Creek between Pismo Beach and Oceano by increasing outlet capacity at Carpenter Creek. The project will include the following components:

1. **Alternatives study and feasibility analysis including cost estimate and permit requirements.**
2. **Preliminary design for outlet expansion.**
3. **Permit acquisition.**
4. **Final design.**
5. **Construction.**

Describe Need for Project/Program (1 to 2 sentences):

Meadow Creek is subject to frequent flooding in the area between Pismo Beach and Oceano. This flooding impacts residents and businesses as well as facilities controlled by California Department of Parks and Recreation, Caltrans, the County of San Luis Obispo, and Grover Beach. Increasing the outlet capacity at Carpenter Creek is widely recognized as viable option for flood reduction because it provides the opportunity for runoff originating in the upper watershed to discharge to the Pacific Ocean before entering the flood prone area.

Project Website (if any):

Subregion (See Map) **South County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address:

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban**

Watershed (if known) See Map: **Meadow Creek**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Planning Phase**

Describe status of permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

CEQA_NEPA has not been started.

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources:

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

No.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

No.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

No.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. Expanding the Carpenter Creek outlet provides the opportunity to restore Carpenter Creek habitat.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring,

banking/recharge, etc.)?

No.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Yes. The primary goal of this project is flood reduction.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes. This project is intended to reduce flooding in Oceano.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes. Climate changes is expected to increase the frequency and severity of flooding in this area. Sea level rise is expected to impact the affected coastal communities and exacerbate flooding. Increasing outlet capacity will help these communities adapt to climate change and reduce the flood related impacts.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

This project will involve partnerships with Pismo Beach, California Department of Parks and Recreation, Caltrans, the County of San Luis Obispo, and Grover Beach.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Flooding in these areas will continue and possibly increase with climate change.

Other Comments:

Meadow Creek Restoration Plan

South County

Sponsoring Agency/Organization: **Central Coast Salmon Enhancement (and Coastal San Luis RCD)**

Contact Name: **Steph Wald**

Affiliation:

Address: **229 Stanley Ave., Arroyo Grande, CA 93420** Phone Number: **805-471-3789**

Email: **steph@centralcoastsalmon.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Work with agencies and landowners to develop a water quality, habitat and flood protection plan for the Meadow Creek Watershed.

Describe Need for Project/Program (1 to 2 sentences):

A holistic planning process is needed to evaluate flood attenuation potential that also enhances habitat and protects water quality in the coastal strip of geography between the downstream reaches of the Pismo Creek and Arroyo Grande Creek watersheds.

Project Website (if any):

Subregion (See Map) **South County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **highway 1 including areas between Pier Avenue_Grande Avenue beach access points and areas upslope into city of Arroyo Grande**

Land Use (e.g., urban, ag, rural residential etc.) See Map:

Watershed (if known) See Map: **Meadow Creek**

Project Cost Range: **$250K-$500K**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Conceptual**

Describe status of permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources:

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

The project will study stormwater management needs for the Meadow Creek watershed.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

The project would involve stakeholder residents and potentially responsible agencies in a facilitated dialog to integrate watershed assessment results with community needs to furnish recommendations for watershed health, community health and safety, and ecosystem values. It would expand environmental and resource stewardship, and include ecosystem restoration, public education and stream flow management.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

The project would involve watershed management and flood control assessment.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

The project would include public outreach and education.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

The project would involve residents of Oceano within the Meadow Creek watershed

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

State Parks, Coastal San Luis RCD, County of San Luis Obispo Public Works would be potential partners

Describe what impacts, if any, will occur if the Project/Program is not implemented:

The Meadow Creek watershed would continue to receive piece-meal solutions to flood protection and habitat enhancement.

Other Comments:

Mid-Higuera Bypass

South County

Sponsoring Agency/Organization: **City of San Luis Obispo**

Contact Name: **Barbara Lynch**

Affiliation: **City of San Luis Obispo**

Address: **919 Palm Street** Phone Number: **805-781-7191**

Email: **blynch@slocity.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The project will construct bypass channels for high flood flows for a portion of San Luis Obispo Creek paralleling the mid-Higuera area in the City of San Luis Obispo.

Describe Need for Project/Program (1 to 2 sentences):

The project has shown to be beneficial in hydraulic studies by reducing the frequency of channel overtopping, which floods nearby areas.

Project Website (if any):

Subregion (See Map) **South County**

If Regional, please indicate which Subregions: **South Coast Sub-region _ City of San Luis Obispo**

Nearest Cross Street or Street Address: **Higuera and Marsh**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban**

Watershed (if known) See Map: **San Luis Obispo _ Avila**

Project Cost Range: **$1M-$5M**

Project Cost (if known): **$3,000,000**

Source of Cost Estimate: **Engineer**

Project Status: **Design Phase**

Describe status of permitting: **Applications are awaiting completion of CEQA document. Permitting estimated to be completed in September 2016**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Technical studies complete, preliminary design underway to allow final CEQA document to be prepared. CEQA

estimated to be completed in July 2015.

Estimated ProjectStart Date: **6/1/2017**

Estimated ProjectEnd Date: **11/15/2017**

Identify proposed funding sources: **City, Zone 9 District, Grant**

What is the Percent Range of Matching Funds? **26%-50%**

Does Project Serve a Disadvantaged Community (DAC)? **San Luis Obispo**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

No

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

No

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes. Project reduces frequency of flow across land and streetscapes with pollutants that are then introduced into the system.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. The project will set aside areas for future bikepath construction, allowing educational opportunities. The bypass channels will provide additional area for recharge, and construction will include establishment of native riparian habitat.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

No.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Yes. Project will reduce flood frequencies and include stream and floodplain restoration.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. Project is on publicly owned lands, managed by the City's Natural Resources staff and will provide opportunities for public education and outreach.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes. Portions of property along this area of the channel are considered lower income areas in the City.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The project is being undertaken by Zone 9 Flood Control and Water Conservation District. The City of San Luis Obispo is providing project management, and the County of San Luis Obispo is completing environmental review and permitting activities.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Flooding will continue in this area at low storm eventts.

Other Comments:

The project was studied and identified in the Watershed Management Plan commissioned by Zone 9, adopted by the City of San Luis Obispo, and approved by the County of San Luis Obispo. The project was adopted as a City Council goal, and is currently funded for environmental permitting and design by Zone 9. Grant funding is needed for construction only.

Morro Bay_Cayucos Sanitation District Salt and Nutrient Management Plan

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **City of Morro Bay**

Contact Name: **Rick Sauerwein**

Affiliation: **City of Morro Bay Capital Projects Manager**

Address: **955 Shasta Road** Phone Number: **772-6266**

Email: **rsauerwein@morro-bay.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

This study will provide an analysis of existing influent conditions, develop projections of future requirements, identify best management practices and develop recommendations to implement control and treatment strategies for influent waste streams.

Describe Need for Project/Program (1 to 2 sentences):

The City of Morro Bay and the Cayucos Sanitation District through an established Joint Powers Authority (JPA) have been working cooperatively for the past seven years on a project to upgrade the existing waste water treatment plant. In January 2013 the California Coastal Commission denied the permit to upgrade at the existing site and directed the relocation of the plant and a significant increase of the reclaimed water reuse component. The ability to significantly increase reclaimed water reuse and achieve new salt and nutrient loading standards will require a careful analysis of existing conditions and recommendations to implement best management practices to control and treat influent waste streams.

Project Website (if any):

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions: **North Coast and North County**

Nearest Cross Street or Street Address: **160 Atascadero Rd**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban Light Industrial**

Watershed (if known) See Map: **WPA3 and WPA4**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Ready for Implementation**

Describe status of permitting: **NPDES Application due Sept 2013**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

None required- Study only

Estimated ProjectStart Date: **1/15/2014**

Estimated ProjectEnd Date: **6/15/2014**

Identify proposed funding sources: **Prop 84**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes, by reducing salt & nutrient levels in effluent more beneficial uses will be available for reclaimed water. Agricultural irrigation is a prime example.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes, by increasing beneficial ag uses for reclaimed water, GW withdrawals will be reduced for irrigation uses and existing appropriated municipal water rights will be preserved.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes, preservation of existing GW supplies through reduced salt and nutrient loading will enhance the diversity of regional water supply options and improve the ability of local agencies to respond to future drought conditions.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes, the study will identify existing and potential sources recommend best management practices, as well as control and treatment strategies

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes, by increasing beneficial ag uses for reclaimed water, GW withdrawals will be reduced and perennial

creek flows will increase, thereby improving aquatic habitat.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes, by increasing beneficial ag uses for reclaimed water, GW withdrawals will be reduced for irrigation uses and appropriated municipal water rights will be preserved.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes, surveys of commercial, agricultural and municipal users will raise awareness of the importance to everyone of water conservation and reuse.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes, CCC direction to relocate the WWTP and increase water reuse is driven by climate change predictions of sea level rise and coastal wave run-up.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

This study will utilize the methodology developed for the North County S&N study

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Until the project is implemented, salt loadings at the WWTP will continue unabated. This means that salt levels in treated effluent will continue at their present levels which are too high for most agricultural reuses. Nutrient levels in existing groundwater wells will continue to impact the City's ability to use these wells as part of the City's water supply portfolio.

Other Comments:

Nacimiento Water Project Energy Recovery Turbine

South County

Sponsoring Agency/Organization: **City of San Luis Obispo**

Contact Name: **Wade Horton**

Affiliation: **City of San Luis Obispo**

Address: **879 Morro Street, San Luis Obispo, CA 93401** Phone Number: **(805) 781-7237**

Email: **WHorton@slocity.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Raw water from the Nacimiento Water Project is delivered to the City's water treatment plant on Stenner Creek Road, and there is significant potential energy in the water that is currently being controlled by head-breaking sleeve valves. A hydroelectric energy recovery turnbine could be used instead of the sleeve valves, and generate clean green hydroelectric power to help partially offset the electrical usage at the City's water treatment plant.

Describe Need for Project/Program (1 to 2 sentences):

A final detailed design study is needed to confirm the feasibility of the project, and if judged feasible, then environmental permitting, FERC permitting for a conduit-exempt project, and design and construction of the project would be needed.

Project Website (if any):

none

Subregion (See Map) **South County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **Stenner Creek Road and CA Highway 1**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban**

Watershed (if known) See Map: **San Luis Obispo_Avila**

Project Cost Range: **$1M-$5M**

Project Cost (if known): **$1,895,000**

Source of Cost Estimate: **Engineer**

Project Status: **Planning Phase**

Describe status of permitting: **None**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

none

Estimated ProjectStart Date: **1/1/2014**

Estimated ProjectEnd Date: **10/31/2015**

Identify proposed funding sources: **Debt financing, grants, equity investing**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **San Luis Obispo**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes - the hydroelectric energy recovery turbine_generator would be installed at the existing water treatment plant near the forebay to the plant.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes, it will generate clean energy that can be used on-site in the treatment of water for the population of San Luis Obispo.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

No

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes, it will generate clean energy that can be used on-site in the treatment of water for the population of San Luis Obispo. Greenhouse gas emissions will be reduced by this project. No streams will be diverted for this installation because the water is coming from the existing Nacimiento Water Pipe.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

No

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood

control projects, system operations, stream/floodplain restoration, etc.)?

No

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes - the project will be a good demonstration project for other water utilities to realize how the can convert water power inside their pipelines into clean hydroelectric generation.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes - SLO is a DAC, and the power produced from the energy recovery turbine will offset PG&E power purchased to operate the City's Water Treatment Plant, therefore the operation cost of the water treatment plant will be reduced, thus saving the citizens of SLO money.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes - it will reduce greenhouse gas emissions. The quantity of reduction has not yet been computed.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The City of San Luis Obispo, PG&E, and the San Luis Obispo County Flood Control and Water Conservation District will be engaged in the project.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Wasted energy within the existing pipeline will be lost. Electrical operating cost savings will be lost to a DAC. Greenhouse gas reduction will not be realized.

Other Comments:

The provided project cost estimate is provided in 2015 dollars.

Nature Center & Conservation Hub

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)**

Contact Name: **Laura Edwards**

Affiliation: **Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)**

Address: **65 South Main Street, Suite 107, Templeton, CA 93465** Phone Number: **805-434-0396 x 5**

Email: **laura@us-ltrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The North County Conservation Center is an organization with a visitor center, classrooms and demonstration grounds. The purpose of this center is to bridge the gap in local awareness about proper resource management, youth conservation education and farmer education.

Describe Need for Project/Program (1 to 2 sentences):

A North County SLO Nature Center provides a hub for conservation education and land for conservation farming demonstration projects. It will promote conservation, research and an appreciation for nature, watersheds and the environment. There is currently no such resource for community members to help with growing resource challenges and shortages.

Project Website (if any):

Subregion (See Map) **Regional** **(2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions: **Located in North County, but will be accessible to all in the region**

Nearest Cross Street or Street Address: **El Pomar**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Rural residents & agriculture**

Watershed (if known) See Map: **Salinas River**

Project Cost Range: **$1M-$5M**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Conceptual**

Describe status of permitting: **TBD**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Estimated ProjectStart Date: **3/1/2015**

Estimated ProjectEnd Date: **3/31/2018**

Identify proposed funding sources: **Local, corporate, grants**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **San Simeon**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

This project will give citizens a place to go for to view, learn and install on-the-ground conservation projects.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes. There are plans to implement organic farming demonstration projects along the Salinas River to demonstrate water quality implementation from planning to final execution.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

No

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes. Implementation demonstration projects will model effective methods of water conservation installments and contribute to water quality.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. This project expands community-wide awareness of local watershed function, biospheric function and practice of new behaviors using these examples.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. This project will educate the community about groundwater basins and functionality.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Yes. Low impact development demonstration projects will be available for the community to install them.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. This will be a high-traffic conservation education center with ongoing outreach clinics.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes. Located within 10 minutes of San Miguel, this project will reach out to this disadvantaged community with special programs.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes. Energy efficient demonstrations will be on display.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Multiple local organizations share the vision for a North County_Salinas River Nature Center and will partner with the US-LTRCD on establishing it.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

North County community members will continue to lack an understanding of best management practices and watershed_foodshed functionality and ecosystem health needs.

Other Comments:

Potential project partners include: ecologists, North County Watch, Templeton Area Advisory Group (TAAG), NRCS, One Cool Earth, and Farm Bureau.

NCMA_NMMA Salt and Nutrient Management Plan (SNMP)

South County

Sponsoring Agency/Organization: **City of Arroyo Grande**

Contact Name: **Teresa McClish**

Affiliation: **City of Arroyo Grande**

Address: **City of Arroyo Grande, 300 E. Branch Street, Arroyo Grande, CA 93420**

Phone Number: **(805) 473-5420**

Email: **tmcclish@arroyogrande.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The purpose of this project is to develop a Salt and Nutrient Management Plan (SNMP) for the portions of the Santa Maria Groundwater Basin (Basin) underlying the Northern Cities Management Area (NCMA) and the Nipomo Mesa Management Area (NMMA) (referred hereafter as the 'Project'). The SNMP will include: basin characterization_ identification of current and future salt and nutrient loading sources_ quantification of these sources_ development of implementation measure, goals and objectives_ creation of a monitoring plan_ and the preparation of a summary report.

Describe Need for Project/Program (1 to 2 sentences):

The Project will build upon prior and ongoing efforts to address groundwater management issues in the Basin to ensure the long-term sustainability of the Basin and meet the regulatory requirements of the State Water Resources Control Board's Recycled Water Policy. The Project will provide supplemental groundwater condition and management data to aid in the development of a groundwater flow model for the Basin.

Project Website (if any):

Subregion (See Map) **South County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **300 E. Branch Street, Arroyo Grande, CA 93420**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Multiple**

Watershed (if known) See Map: **Five Cities_Nipomo Mesa**

Project Cost Range: **$250K-$500K**

Project Cost (if known): **$250,000**

Source of Cost Estimate: **Other**

Project Status: **Planning Phase**

Describe status of permitting: **NA**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

The completed SNMP will become an amendment to the CCRWQCB's Basin Plan. Basin Plan amendments are a Certified State Regulatory Program making them exempt from the CEQA process.

Estimated ProjectStart Date: **1/1/2014**

Estimated ProjectEnd Date: **11/30/2015**

Identify proposed funding sources: **None**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

An improved understanding of the hydrogeology and salt and nutrient movement will help develop a framework for permitting and implementing groundwater storage projects, developing recycled water projects, and improving stormwater management while preventing water supply and conservation projects from detrimentally impacting the water quality and reliability in the basin.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

This Project will help maintain the long-term sustainability of the Basin, protect beneficial uses, and integrate related collaborative efforts by:
1. Providing a structure for monitoring water quality throughout the Basin_
2. Developing implementation measures, goals and objectives designed to manage salt and nutrient loading_
3. Meeting the requirements of the State Water Board's Recycled Water Policy_
4. Supporting the DWR's CASGEM monitoring program_
5. Supporting the State Water Board's GAMA monitoring program_
6. Augmenting Court ordered monitoring and management reporting_
7. Developing a conceptual model for the Basin that can be utilized to better evaluate water resource management alternatives_
8. Identifying basin management objectives consistent with the CCRWQCB's Water Quality Objectives and Monitoring and Assessment Objectives, as well as the management objectives defined by the Judgment and subsequent annual reports for each of the Management Areas_ and
9. Evaluating potential for conjunctive use opportunities or conceptual recharge projects and their effectiveness.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The SNMP would become part of the CCRWQCB's Basin Plan, which will continue to use the SNMP as a resource for regulating salt and nutrient loading within the Basin. The updated Basin Plan would also provide a regulatory framework for permitting recycled water projects. The SNMP and data collected to create the SNMP could eventually feed into a Basin groundwater flow model that will aid the stakeholders in managing and operating their groundwater resources. The development a groundwater flow model could help to identify potential recharge areas within the Basin. These recharge areas could be utilized for conjunctive use programs or developing seawater intrusion barriers.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

The SNMP would become part of the CCRWQCB's Basin Plan, which will continue to use the SNMP as a resource for regulating salt and nutrient loading within the Basin. The SNMP and updated Basin Plan would provide a valuable resource for monitoring and improving water quality.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

The SNMP must evaluate environmental impacts_ comply with noticing requirements_ and if significant adverse impacts exist then adopt feasible alternatives or mitigation measures to reduce impacts. The CCRWQCB would be required to evaluate the environmental consequences through its own process. The development a groundwater flow model could help to identify potential recharge areas within the Basin. These recharge areas could be utilized for conjunctive use programs or developing seawater intrusion barriers.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

This Project will help maintain the long-term sustainability of the Basin, protect beneficial uses, and integrate related collaborative efforts by:
1. Providing a structure for monitoring water quality throughout the Basin_
2. Developing implementation measures, goals and objectives designed to manage salt and nutrient loading_
3. Meeting the requirements of the State Water Board's Recycled Water Policy_
4. Supporting the DWR's CASGEM monitoring program_
5. Supporting the State Water Board's GAMA monitoring program_
6. Augmenting Court ordered monitoring and management reporting_
7. Developing a conceptual model for the Basin that can be utilized to better evaluate water resource management alternatives_
8. Identifying basin management objectives consistent with the CCRWQCB's Water Quality Objectives and Monitoring and Assessment Objectives, as well as the management objectives defined by the Judgment and subsequent annual reports for each of the Management Areas_ and
9. Evaluating potential for conjunctive use opportunities or conceptual recharge projects and their effectiveness.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood

control projects, system operations, stream/floodplain restoration, etc.)?

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

The project stakeholders include water agencies, wastewater agencies, agricultural interests, recycled water producers, private well owners, environmental groups, regulatory agencies and the general public. The development of the Project is required to be a stakeholder driven process and will involve collaborative efforts between all of the stakeholders. The Project would engage regional planning efforts to develop regional water reliability and quality projects for the South County Sub-Region and would facilitate data sharing between the NCMA and NMMA Technical Groups.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

The NCMA and NMMA boundaries overlay the community of Oceano. The SMGB is one of the key water supply sources for the agencies within the NCMA and NMMA. Improved characterization of the groundwater basin will benefit the overlying DAC by providing the management areas technical groups with data to make more informed decisions related to improving water supply reliability, protecting water quality, and safeguarding this essential water supply resource.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The project stakeholders include water agencies, wastewater agencies, agricultural interests, recycled water producers, private well owners, environmental groups, regulatory agencies and the general public. The development of the Project is required to be a stakeholder driven process and will involve collaborative efforts between all of the stakeholders. Furthermore, the Project would include an effort to work with the agencies within the portion of the groundwater basin underlying Santa Barbara County, which is within its own IRWM region.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the SNMP is not developed, salt and nutrient pollution may impact the beneficial uses of the portions of Basin within the NCMA and NMMA. Addtionally, the South County Sub-Region stakeholders may not be in compliance with the State Water Resources Control Board's Recycled Water Policy.

Other Comments:

North Coast Watershed Plans

North Coast

Sponsoring Agency/Organization: **US-LT RCD**

Contact Name: **Laura Edwards**

Affiliation: **US-LT RCD**

Address: **65 S. Main Street Suite 107, Templeton, CA 93465** Phone Number: **805-434-0396 x 5**

Email: **laura@us-ltrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Develop watershed management plans for watersheds in the North Coast region where water supplies are stressed.

Describe Need for Project/Program (1 to 2 sentences):

Water supplies and watershed health are diminishing in the North Coast region of the County due to increased draw by increasing populations and increased climate change impacts. Developing management plans for various stressed watersheds within the North Coast region will provide implementation strategies to return watersheds to a healthy state, increasing water availibility,reversing climate change impacts and addressing any water quality issues flows released into the Monterey Bay National Marine Sanctuary.

Project Website (if any):

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address:

Land Use (e.g., urban, ag, rural residential etc.) See Map:

Watershed (if known) See Map: **Big Creek, San Simeon, Cambria, Cayucos**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Ready for Implementation**

Describe status of permitting: **n_a**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

n_a

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources:

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **San Simeon**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

The proposed watershed management plan(s) will provide concrete targeted recommendations to increase groundwater recharge, provide stormwater management strategies, provide locations for efficient and effective infiltration, and address water use efficiency for area land uses.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

The proposed watershed management plan(s) will provide recommendations specific to the region related to access to water rights and existing water supplies, water supply management, water quality, and sustainability of Ag, rural, and urban water supplies.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

No

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Watershed plan(s) will identify implementation strategies for improving water quality including improving groundwater conditions and providing recommendations to reduce pollutant loads, including those flowing into the waters of the Monterey Bay National Marine Sanctuary.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

The project will expand environmental stewardship and provde recommendations to ensure that each watershed ecosystem is restored. The plan would identify key infiltration zones for targeted protection strategies and provide direction for land use management of existing Agricultural, rural, and urban land uses. In addition, the plan would provide details for in stream flow management, invasive species reduction and increasing habitat conditions for steelhead trout survival and migration.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats

of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

The project will provide a more detailed analysis of the existing groundwater basins and key alluvial water supply areas and provide basin and water supply management strategies.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

The proposed plan(s) will provide specific tageted areas for LID implementation, watershed and flood management, and stream restoration.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

The watershed plan(s) will have a public outreach and an education component in addition to providing recommendations for collaborative programs between agricultural and urban landowners.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

San Simeon is located within the North Coast area and would benefit from the development of an area wide watershed plan.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

The proposed plan will address impacts related to climate change throughout the watersheds of the North Coast and provide recommendations for reversing climate change impacts, including strategies for decreasing water temperature, increasing riparian vegetation, and increasing carbon sequestering.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Big Creek watershed is located in San Luis Obispo County and Monterey County. The US-LT RCD would coordinate efforts for this watershed with Monterey County. In addition, the RCD will coordinate efforts with the County and Community Service districts within the North Coast Area.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Lack of knowledge about local watersheds results in management efforts that do not fully maximize conservation and restoration efforts.

Other Comments:

North County Fertilizer Regions_ Precision Agriculture

North County

Sponsoring Agency/Organization: **Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)**

Contact Name: **Laura Edwards**

Affiliation: **Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)**

Address: **65 South Main Street, Suite 107, Templeton, CA 93465** Phone Number: **805-434-0396 x 5**

Email: **laura@us-ltrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Provide a Brief Project/Program Description (1 to 2 sentences):

Develop fertilizer blends customized to North County growing conditions. Identify fertilizer recommendation zones for the various climates in North County.

Describe Need for Project/Program (1 to 2 sentences):

Precision agriculture can help reduce nutrient applications by growers. Traditional practices often apply more than is necessary resulting in nutrient contamination of surface and groundwaters by leaching and in runoff. By researching soils and climatic factors, recommendations and fertilizer blends can be developed, and growers can be educated about how be manage their nutrient appliations

Project Website (if any):

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **North County at large**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Agriculture**

Watershed (if known) See Map: **Multiple - Paso Robles Groundwater Basin**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Design Phase**

Describe status of permitting: **Permits not required**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

CEQA exempt

Estimated ProjectStart Date: **1/1/2014**

Estimated ProjectEnd Date: **1/31/2016**

Identify proposed funding sources: **Grants, local municipality, Community Services Districts**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **San Miguel**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes, Groundwater storage and water use efficiency due to soil building

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes, improve existing water quality, sustainability of supplies for agricultural, rural and urban uses.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes. Drought preparedness & education.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes, improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to surface or groundwater

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. Expand environmental and resouce stewardship, ecosystem restoration, public education, land use management.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. Public awareness, education and behavior change.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Yes. Public awareness, education and behavior change.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education,

collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. Public awareness, education and behavior change.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes. Critical water quality or quantity, contamination of surface and groundwaters, public awareness, education and behavior change in disadvantaged communities.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes. Adding vegetation will be a recommended behavior change, reduce greenhouse gas emission due to decreased nitrogen fertilizer usage

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Awareness levels of fertilizer overapplications will remain low. Risk of watershed pollution remains the same or increases as agriculture lands increase.

Other Comments:

North County Precision Irrigation Research Program_ Precision Agriculture

North County

Sponsoring Agency/Organization: **Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)**

Contact Name: **Laura Edwards**

Affiliation: **Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)**

Address: **65 South Main Street, Suite 107, Templeton, CA 93465** Phone Number: **805-434-0396 x 5**

Email: **laura@us-ltrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Provide a Brief Project/Program Description (1 to 2 sentences):

Research methods of precision irrigation to reduce water usage. Educate users on these methods and provide demonstrations, workshops and incentives for them to use these modern practices.

Describe Need for Project/Program (1 to 2 sentences):

Precision agriculture can help reduce water usage by irrigation users. Traditional practices are based on seasonal patterns and custom instead of quantitative data. By using weather data and having a clear understanding of the relationship between soil fertility and water holding capacity, growers can schedule their irrigations towards wiser water use.

Project Website (if any):

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **North County at large**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Agriculture**

Watershed (if known) See Map: **Multiple - Paso Robles Groundwater Basin**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Design Phase**

Describe status of permitting: **Permits not required**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

CEQA exempt

Estimated ProjectStart Date: **1/1/2014**

Estimated ProjectEnd Date: **1/31/2016**

Identify proposed funding sources: **Grants, local municipality, Community Services Districts**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **San Miguel**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes, Groundwater storage and water use efficiency

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes, improve water supply management, existing water quality, sustainability of supplies for agricultural, rural and urban uses.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes. Drought preparedness & education.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes, improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to surface or groundwater

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. Expand environmental and resouce stewardship, public education, land use management.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. Understanding of groundwater basin and threat of overbraft, banking_recharge, public awareness, education and behavior change.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. Public awareness, education and behavior change.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes. Critical water quality or quantity, public awareness, education and behavior change in disadvantaged communities.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes. Energy efficient approach, reduce greenhouse gas emission due to decreased nitrogen fertilizer usage.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Continued stress on Paso Robles Groundwater Basin due to overapplication of irrigation water. Continued use of traditional practice instead of science based precision agricultural practices.

Other Comments:

North County Strategic Plan

North County

Sponsoring Agency/Organization: **Institute for Advanced Technology & Public Policy, Cal Poly, San Luis Obispo**

Contact Name: **Christine Robertson**

Affiliation: **Associate Director**

Address: **1 Grand Avenue, San Luis Obispo, CA 93407** Phone Number: **(805) 756-1694**

Email: **crober22@calpoly.edu**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Assemble a multidisciplinary team with expertise in hydrology, resource management, wildlife conservation, ecosystem restoration, GIS mapping and land use to perform an integrated analysis of the Salinas River corridor within the Paso Robles Groundwater Basin boundaries and develop a strategic plan to improve the natural recharge of the groundwater Basin while also improving the ecological health of the river system. Project components include: 1. Compile existing data and studies regarding the historic condition of the Salinas River, including water flows, steelhead counts, and system ecology to establish a baseline of historic conditions that can inform a river restoration strategic plan_ 2. Study the hydrology of the river system within the boundaries of the Basin to identify key recharge sites and assess the extent to which increased flow could benefit both groundwater basin recharge and the river ecosystem (including steelhead populations, intact riparian corridors, and improved wildlife habitat). 3. Conduct GIS mapping of the Salinas River corridor and watersheds within the Basin to identify key land conservation opportunities that could improve river flow, increase Basin recharge, and protect critical habitat. This study will concentrate first on the Salinas River but will later apply similar analyses to other fluvial systems involved in the recharge of the basin.

Describe Need for Project/Program (1 to 2 sentences):

The Paso Robles Groundwater Basin is in decline at the same time that the Salinas River has been designated an 'impaired water body' by the CA State Water Resources Control Board and a 'priority watershed' by the Central Coast Regional Water Quality Control Board. Conservation, restoration and recharge strategies along the Salinas River should have the mutually reinforcing benefits of improving the sustainability of the groundwater Basin, riparian and wildlife corridors along the Templeton and Paso Robles Watersheds, and Salinas River ecosystem.

Project Website (if any):

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **N_A**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Agricultural and rural residential properties along the Salinas River**

Watershed (if known) See Map: **Templeton and Paso Robles**

Project Cost Range: **$1M-$5M**

Project Cost (if known): **$3,000,000**

Source of Cost Estimate: **Agency**

Project Status: **Conceptual**

Describe status of permitting: **N_A**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

N_A

Estimated ProjectStart Date: **7/6/1905**

Estimated ProjectEnd Date: **7/8/1905**

Identify proposed funding sources: **IRWM, in-kind contributions and grant funding.**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Enhanced recharge assists with stormwater management and groundwater storage.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Study the hydrology of the river system within the boundaries of the Basin to identify key recharge sites and assess the extent to which increased river flow could improve the sustainability of the groundwater basin

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Improving river flow and recharge will improve the sustainability and reliablity of the groundwater supply.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Enhanced conservation, restoration and recharge strategies along the Salinas River will directly benefit agricultural water users dependent upon a sustainabile groundwater basin.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Identifcation of priority sites for ecosystem restoration that restore critical habitats for steelhead through increased river flow, conserve critical riparian corridors and enhance groundwater recharge.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Through hydrologic analysis and GIS mapping, this project seeks to directly address the overdraft of the Paso Robles Groundwater Basin and provide practical basin recharge and management strategies.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

GIS mapping of the watershed and key recharge zones, combined with restoration and conservation strategies will improve flood management

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

With the Salinas River corridor as the project focus, project participants would collaborate with adjacent agricultural and rural property owners, as well as environmental and agricultural organizations.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The Institute will collaborate with San Luis Obispo County, the Regional Water Quality Control Board, and local nonprofit organizations such as Ecologistics to compile historic data and relevant studies to inform the strategic plan described above.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Efforts to restore the Salinas River and efforts to address the overdraft of the Paso Robles Groundwater Basin will likely be pursued with minimal coordination, missing important opportunities to realize restoration and conservation efficiencies and cost savings.

Other Comments:

Oceano Drainage Improvement Project - Hwy 1 & 13th Street

South County

Sponsoring Agency/Organization: **County of San Luis Obispo, Department of Public Works**

Contact Name: **Jeff Lee**

Affiliation: **San Luis Obispo County Flood Control & Water Conservation District**

Address: **1050 Monterey Street, Room 206, San Luis Obispo, CA 93408** Phone Number: **805-781-1043**

Email: **jlee@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Generally, the Project includes construction of approximately 1,500 feet of storm drain pipe, to convey drainage from the intersection of Highway 1 and 13th Street, and an outfall pond (sedimentation basin). The basin will collect storm flows and allow debris and sediments to settle out prior to discharge through the existing 36-inch culvert or a new box culvert located in the Arroyo Grande Creek levee.

Describe Need for Project/Program (1 to 2 sentences):

The project is located at the low point of an approximately 40.5 acre drainage shed area. The existing system is undersized for small storm events and as a result floods the Hwy 1 and 13th Street intersection and adjacent properties. The project will reduce the frequency of drainage issues at Hwy 1 and 13th Street by constructing drainage facilities that collect and convey flows to the Arroyo Grande Creek channel. The project will also lessen flows to the Meadow Creek Lagoon area, thereby_ helping to mitigate the existing drainage issues for downstream residences, businesses and the South County Sanitation District facilities. The project will reduce maintenance and storm related management of the surrounding area. It will improve access and circulation on Hwy 1 and adjacent roadways as well as increasing the efficiency of road operations and improve emergency response times for the surrounding area.

Project Website (if any):

http:__www.slocountywater.org

Subregion (See Map) **South County**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **Hwy 1 & 13th Street**

Land Use (e.g., urban, ag, rural residential etc.) See Map:

Watershed (if known) See Map:

Project Cost Range: **$1M-$5M**

Project Cost (if known): **$2,699,000**

Source of Cost Estimate:

Project Status:

Describe status of permitting: **In process (25%)_ estimated completion by June 2014**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

In process (50_10%)_ estimated completion by Dec 2012_ Dec 2014

Estimated ProjectStart Date: **7/1/2010**

Estimated ProjectEnd Date: **10/1/2014**

Identify proposed funding sources: **County funds to Speial District (Flood Control), Caltrans, SLOCOG (USHA & RSHA), FAA grant and CDBG program**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Project includes road-side infiltrators to direct storm water back into the ground water acquifer.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

No

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Sediment basin and road-side infiltrators will remove debris & sediment from storm water_ improving water quality.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

No

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Project includes road-side infiltrators to direct storm water back into the ground water aquifer.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

The project provides flood water management to alleviate flooding of properties adjacent to Hwy 1 at its intersection with 13th Street. This project will provide the opportunity for adjacent properties to develop to their best and highest use within the County Planning land use guidelines. This project improves conditions at Hwy 1 & 13th Street by conveying storm water away from intersection to AG Creek and addresses long-term stormwater issues at Hwy 1 & 13th Street by installating storm drains, basin & infiltrators. It also provides flood management & protection to travelling public and emergency services

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

The project provides benefits to Oceano, a disadvantaged community as defined by HUD. Area benefits include improved traffic safety and emergency response times since the project will alleviate flooding conditions at the intersection of Hwy 1 and 13th Street in Oceano. Demonstrating the degree of benefit can be accomplished by quantifying the amount of time Hwy 1 will be open during storm events (post project) as compared to the pre-project closure time.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Project funding sources for this project include: San Luis Obispo Council of Governments (Urban State Highway and Regional State Highway Accounts), State Department of Transportation (Caltrans) and Housing & Urban Development (CDBG Program). County, Caltrans and OCSD are working together to improve Oceano area by developing program to construct curb, gutter and sidewalk improvements in a concerted and public driven pattern.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the project is not implemented, the roadway will continue to flood in smaller storm events, resulting in road closures and increased emergency response times during storm events. This has the potential to impact the health and safety of the travelling public and adjacent community.

Other Comments:

Off Stream Storage within the North County

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS) (predecessor to future California Water District)**

Contact Name: **Jerry Reaugh, Board President**

Affiliation: **Paso Robles Agriculture Alliance for Groundwater Solutions**

Address: **P. O. Box 1499, Paso Robles, CA 93447** Phone Number: **(805) 440-7300**

Email: **jerry@reaughj.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Develop offstream storage in the North County to be capable to store several sources of water including but may not be limited to: Entitlement water from the Nacimiento Water Project that is subject to being lost because of a lack of carryover storage in Lake Nacimiento, opportunity flood waters off rivers and streams, opportunity waters within the alluvium of the Salinas River and its tributaries that are supplemental to waters already appropriated by others, and recycled water from wastewater treatment plants.

Describe Need for Project/Program (1 to 2 sentences):

The project will require the installation of water conveyance infrastructure (pumps, pipes) and an off stream reservoir site(s) to store several thousand acre-feet of water in temporary holding facilities. This water will then be distributed to help recharge the Paso Robles Groundwater Basin, most likely via in-lieu recharge.

Project Website (if any):

n_a

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions: **North County and South County**

Nearest Cross Street or Street Address: **North County of San Luis Obispo County**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban, Agricultural, Rural Residential, Golf Courses**

Watershed (if known) See Map: **Salinas, Creston and Shandon**

Project Cost Range: **>$5M**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Conceptual**

Describe status of permitting: **n_a**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

n_a

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **Grants and Bonds**

What is the Percent Range of Matching Funds? **26%-50%**

Does Project Serve a Disadvantaged Community (DAC)? **San Luis Obispo**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes, water conservation is increased by having off stream reservoir(s) in the North County vicinity. There is water entitlement within Lake Nacimiento that can be stored in the off stream reservoirs, otherwise it is lost if not used in the year. There is stromwater available in the rivers and streams to capture and not let flow to the ocean. Participants in the Nacimiento Water Project can bank their entitlement within an off stream reservoir. The stored waters can be distributed within the North County and used for in-lieu recharge to the Paso Robles Groundwater Basin.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes, this project would preserve water rights on the Nacimiento River. Annual any of the County's Nacimiento Entitlement not used is reverted back to Monterey County. An off-stream storage within SLO County would allow for this unused entitlement to be stored and used when needed within SLO County.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The change in storage of the Paso Robles Groundwater Basin decreases significantly when there is drought because the demands, largely agricultural and M&I, go up while the inflow is decreased. Utilizing the waters stored in an off stream reservoir will be used for in-lieu recharge of the Basin to keep the Basin's inflow in balance with the outflow during drought.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Improvements to water quality are not fully understood at this time.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship,

ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Improvements to environment are not fully understood at this time.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes, the water within the basin will be distributed within the basin for both direct recharge (where available) and in-lieu recharge of the Paso Robles Groundwater Basin.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Improvements to flood management are not fully understood at this time.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes, the project will be available for many agencies to store their water within the off stream reservoir(s). The communities that rely on groundwater will have improved management of the groundwater resources by allowing the surface water to be recharged via in-lieu recharge. The waters of the North County will stay in the county and be controlled by a local agency that partners with other water purveyors in the area.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

San Luis Obispo can temporarily bank their Nacimiento entitlement in the off stream reservoir(s). San Miguel's groundwater supplies will benefit by the in-lieu recharge of the Basin and thus putting the inflow and outflow of the basin in balance.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Climate change has not been assessed at this time.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The partnership that is expected to collabratively work together includeds the Nacimiento Water Commission, the County Flood Control and Water Conservation District, the Cities of Paso Robles and San Luis Obispo, Atascadero Mutual Water Company, and CSD's along the Salinas River.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Water that is entitled within SLO County will continue to be lost and flow into Monterey County. This water volume is significant and should be used to help balance the groundwater resrouces of the Paso Robles

Basin.

Other Comments:

This is a long term project that will bring several stakeholders together to find the best site(s) for offstream storage to allow SLO County the local-control of our water resources.

Paso Robles Groundwater Basin In-Lieu Recharge Study and Preliminary Layout

North County

Sponsoring Agency/Organization: **Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS) (predecessor to future California Water District)**

Contact Name: **Jerry Reaugh, Board President**

Affiliation: **Paso Robles Agriculture Alliance for Groundwater Solutions**

Address: **P. O. Box 1499, Paso Robles, CA 93447** Phone Number: **(805) 440-7300**

Email: **jerry@reaughj.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The inflow to the Paso Robles Groundwater Basin is heavily dominated by percolation from precipitation on the land and percolation through the boundaries of flowing streambeds, estimated on average to be 79% of all inflow to the Basin by Fugro (2005 Study). During drought, this inflow to the Basin is signficantly reduced_ therefore, a supplemental source of inflow is needed, and this can be accomplished through in-lieu recharge of the basin. A distribution system needs to be laid out for the North County Region to supply surface waters to irrigated (agricultural and golf courses) and rural residental areas. The water sources could potentially be: Nacimiento Water Project water, State Water Project water, and opportunity storm flows on the rivers and streams within the area.

Describe Need for Project/Program (1 to 2 sentences):

The project is needed to bring the Paso Robles Groundwater Basin in-balance during periods of drought.

Project Website (if any):

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **North County of San Luis Obispo, overlying the Paso Robles Groundwater Basin**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban, Agricultural, Rural Residential, and Golf Courses**

Watershed (if known) See Map: **Salinas, Creston and Shandon**

Project Cost Range: **>$5M**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Conceptual**

Describe status of permitting: **n_a**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

n_a

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **Grants and Bonds**

What is the Percent Range of Matching Funds? **26%-50%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes, the project will increase water in the groundwater basin. Water sources could be raw water, potable water, and recycled water.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Existing supplies of water (Nacimiento, State Water, Salinas River) will be used in the in-lieu recharge system.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The system will improve the delivery of water from sources of supply to areas of stress caused by high demand coupled with dought-driven low inflow to the groundwater basin.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Improvements to water quality are not currently known.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Improvements to the environment are not currently known.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes, the project will improve groundwater management as its intent is to stablize and improve the groundwater in storage by providing a supplemental supply to the basin during periods of drought. During

wet periods, the in-lieu recharge is expected to increase the water in storage as the natural inflow will be greater than the demand on the basin. The Basin is not currently classified as 'in overdraft' but it is generally believed that the perennial yield is beign exceeded during drough conditions.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes, the project will benefit agricultural, rural residential, recrecation (golf courses) and organized communities and water companies. A large-scale collaboration of stakeholders will be involved in this project.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Technically, no_ however, there are areas of densely subdivided rural residental areas that economically could be judged as DAC, but are presently not identified on the DAC list.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The parties expected to be collaborative partners in this project include but are not limited to the State Department of Water Resources, San Luis Obispo County Flood Control and Water Conservation District, Nacimiento Water Commission, Cities of San Luis Obispo and Paso Robles, Atascadero Mutual Water Company, Community Services Districts of Templeton and Ground Squirrel Hollow, and currently unorganized subdivided areas of Jardine, Geneseo, and Creston.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

The decline of the Paso Robles Groundwater Basin during drought periods, and perhaps even during non-drought conditions, would continue.

Other Comments:

Paso Robles Groundwater Basin Restoration and Basin Recharge

North County

Sponsoring Agency/Organization: **Upper Salinas-Las Tablas Resource Conservation District**

Contact Name: **Laura Edwards**

Affiliation: **Upper Salinas-Las Tablas Resource Conservation District**

Address: **65 S. Main Street, Templeton, CA** Phone Number: **805-434-0396 x 5**

Email: **laura@us-ltrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Manage the Paso Robles Groundwater Basin by installing removable bladder dams on Salinas River and tributaries. Alsio, perform water extraction from deep aquifer strata and inject into shallow aquifer strata.

Describe Need for Project/Program (1 to 2 sentences):

San Luis Obispo County Board of Supervisors declared the Paso Robles Groundwater Basin to be at a Severity Level III and solutions need to be identified and implemented.

Project Website (if any):

None

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **Various Salinas River tributaries**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Agicultural Land**

Watershed (if known) See Map: **Upper Salinas River, Huero Huero Creek, and San Juan Creek**

Project Cost Range: **$500K-$1M**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Conceptual**

Describe status of permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

CEQA compliance has not been completed

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources:

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **San Miguel**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes, removable bladder dams would create retention_detention water pools that would capture stormwater runoff for percolation in the aquifer.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes, capturing stormwater runoff for percolation into the aquifer has a sustainability benefit for overlying aquifer users.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes, water extraction from deep aquifer strata and injection into shallow aquifer strata prevents impacts of drought.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes, use of removable bladder dams will facilitate local mangement of sediment.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes, the Paso Robles Groundwater Basin is replenished by rainwater. Capturing runoff for percolation to the basin is a benefit to the overlying aquifer users.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes, water extraction from deep aquifer strata and injection into shallow aquifer strata will recharge shallow srata more quickly than rainfall alone.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Yes, removable bladder dams assist in flood control by slowing down water flow and increasing

percolation.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes, extraction from deep strata would be done by ag for the benefit of rural residential water users.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes, San Miguel is being included in this project.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes, retaining beneficial use of stormwater runoff by recharging an aquifer is a water conservation tool.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The partnering agencies are US-LT RCD, SLOFC & WC District, San Miguel Community Services District and CA Fish and Wildlife.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

The Paso Robles Groundwater Basin will remain at a Level of Severity III and the aquifer could go into adjudication due to water overdraft.

Other Comments:

Phase 2 - Lake Nacimiento Potable Water Treatment Plant

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **City of Paso Robles**

Contact Name: **Christopher Alakel**

Affiliation: **City of Paso Robles**

Address: **1000 Spring St., Paso Robles, California 93446** Phone Number: **805-237-3861**

Email: **calakel@prcity.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The project involves the construction of a Phase 2, potable water treatment plant having a capacity of 4 million gallons per day (mgd). Construction of this plant will enable full utilization of the City's Lake Nacimiento water allocation (4,000 AF_YR) and enable the City to contract for additional Nacimiento water supplies in the future. The plant will utilize microfiltation membrane treatment technology.

Describe Need for Project/Program (1 to 2 sentences):

As of 2013, the City of Paso Robles is entirely dependent on groundwater from the declining Paso Robles Groundwater Basin. Groundwater levels in the immediate area around Paso Robles have fallen over 100 feet in the last 15 years and continue to fall at a rate of 7+ feet per year. The City has made a large financial committment along with other regional partners to reduce it's dependence on the basin through development of supplemental Lake Nacimiento supplies. The project will enable full utilization of the City's 4,000 AF_YR lake Nacimiento water allocation, relieving water demands on the groundwater basin.

Project Website (if any):

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **Highway 46 and Highway 101**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban**

Watershed (if known) See Map: **Salinas**

Project Cost Range: **>$5M**

Project Cost (if known):

Source of Cost Estimate: **Engineer**

Project Status: **Planning Phase**

Describe status of permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Completed, 2008

Estimated ProjectStart Date: **1/1/2020**

Estimated ProjectEnd Date: **6/30/2021**

Identify proposed funding sources: **Water Rate Revenues**

What is the Percent Range of Matching Funds? **>51%**

Does Project Serve a Disadvantaged Community (DAC)? **Paso Robles**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

The project will significantly increase the availability of supplemental water supplies for beneficial use within the stressed Paso Robles Groundwater Basin. In addition, it will provide increased potable water supply capacity for Paso Robles, which is now operating under a summertime supply deficit, necessitating outdoor water restrictions.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

The project will provide multiple water supply benefits within the North County region, including improving accessibility to existing surface water rights and improved groundwater management which will benefit all users in the groundwater basin.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The project will improve the current summertime water supply deficit within the City of Paso Robles and improve the long-term water supply reliability for the City.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Lake Nacimiento water is significantly lower in Total Dissolved Solids and Hardness than the City's existing groundwater supplies. The project will significantly improve the quality of water delivered to customers within the City, enabling water softener use to be greatly reduced. This will improve the quality of wastewater discharged to the Salinas river and enable the future use of recycled water by irrigation users inside and outside the City of Paso Robles.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship,

ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. The project will result in improved quality of wastewater discharged to the Salinas River.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. The project will enable the City to reduce groundwater pumping which will have a positive impact to the management efforts within the Paso Robles Groundwater Basin.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. Implementation of the project would have a positive impact on cooperative and collaborative efforts to manage the groundwater basin.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes. Paso Robles has been designated as a disadvantaged community.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes. The treatment plant will be designed with the latest available energy saving technology.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The Project will increase utilization of the Nacimiento Water Project, a County-wide regional supplemental water supply project.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the project is not implemented, the City will continue to be largely dependent on the declining Paso Robles Groundwater Basin. Summertime supply reliability concerns will continue. A key supplemental water supply for the basin will remain unused and regional groundwater management benefits will not be achieved.

Other Comments:

Pismo Beach Recycled Water System

South County

Sponsoring Agency/Organization: **City of Pismo Beach**

Contact Name: **Benjamin Fine**

Affiliation: **City of Pismo Beach**

Address: **760 Mattie Road, Pismo Beach, CA 93449** Phone Number: **805-779-1201**

Email: **bfine@pismobeach.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The project includes the design and construction of a recycled water treatment and distribution system for the City of Pismo Beach. The project would make recycled water available for its customers and potentially others in the South County Sub-region if excess recycled water is available.

Describe Need for Project/Program (1 to 2 sentences):

This project addresses the need for reliable water supply during periods of drought and would augment the City's diversified water supply portfolio. The implementation of a recycled water project would reduce the City's dependence on imported SWP water and reduce demands on the South County Sub-Region's potable water supplies.

Project Website (if any):

Subregion (See Map) **South County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **760 Mattie Road, Pismo Beach, CA 93449**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Multiple**

Watershed (if known) See Map: **Five Cities**

Project Cost Range: **$1M-$5M**

Project Cost (if known):

Source of Cost Estimate: **Engineer**

Project Status: **Design Phase**

Describe status of permitting: **Pending**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Pending

Estimated ProjectStart Date: **10/1/2014**

Estimated ProjectEnd Date: **10/1/2016**

Identify proposed funding sources: **None**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes, the project would utilize new recycled water supply sources for the following, but not limited to, uses: landscape irrigation_ agriculture irrigation_ industrial uses_ seawater intrusion barrier_ stream flow augmentation_ groundwater recharge_ etc.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes, the project would augment existing water supply availability and increase reliability by supplying non-potable uses that are currently served with potable water.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes, the project would augment existing water supply availability and increase reliability, including drought preparedness, by supplying non-potable uses that are currently served with potable water.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes, the use of recycled water use would have to comply with the water quality requirements of the CCRWQCB's Basin Plan and could be used to prevent seawater intrusion.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Recycled water could be used for stream flow augmentation or to offset extractions from surface water and groundwater sources. This would provide additional water for ecosystem restoration and_or environmental water demands.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes, groundwater basin monitoring and management would be an integral part of the Recycled Water System. Additionally, a Recycled Water System would provide a source of supply for groundwater banking

and recharge.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes, implementation of a Recycled Water System would include extensive public outreach, stakeholder collaboration and consumer education.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes, the community of Oceano would benefit from enhanced groundwater supply reliability.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes, a Recycled Water System could be utilized to reduce the impacts of sea level rise through the development of a seawater intrusion barrier. Additionally, reclaiming locally produced wastewater may produce lower greenhouse gas emissions than importing addition State Water Project Water.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The project stakeholders would include regional wastewater agencies, agricultural interests, recycled water producers, private well owners, environmental groups, regulatory agencies and the general public.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If this project is not implemented, wastewater generated by Pismo Beach will continue to be discharged to the ocean and not utilized to improve the water supply reliability for the South County Sub-Region.

Other Comments:

Portions of Pismo Beach are considered DACs when analyzed at the block and census block level. The DACs would benefit from the project by having increased water supply reliability. The project could make recycled water available to other DACs, such as Oceano, in the South County Subregion as well.

Pismo Creek Watershed Program

South County

Sponsoring Agency/Organization: **Central Coast Salmon Enhancement (CCSE)**

Contact Name: **Steph Wald**

Affiliation:

Address: **229 Stanley Ave., Arroyo Grande, CA 93420** Phone Number: **805-471-3789**

Email: **steph@centralcoastsalmon.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The Pismo Creek Watershed Program will implement specific project recommendations arising from the Pismo Creek Watershed Management Plan (CCSE, 2009) and the Pismo Creek Estuary Restoration Plan (CCSE, 2012) that include fish passage improvement, habitat enhancement, water quality, community education and flood protection components. Projects are: Pismo Creek Fish Passage Improvement Project at Price Canyon_UPRR crossing, Hyla Crossing Improvement Project at PXP Arroyo Grande Oil Field (Price Canyon), West Corral de Piedra Fish Passage Improvement Project at Highway 227, Riparian Fencing Plan, LID Tributary Area BMP Project including BMP Rebate Program for City of Pismo Beach, Pismo Creek Estuary Education and Restoration Project, and Constructed Wetlands Project upstream of the Estuary.

Describe Need for Project/Program (1 to 2 sentences):

The Pismo Creek Watershed Program is needed to continue involving watershed landowners, residents and pertinent agencies in addressing steelhead barrier remediation, estuary water quality issues, habitat degradation and flood protection values.

Project Website (if any):

Subregion (See Map) **South County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address:

Land Use (e.g., urban, ag, rural residential etc.) See Map: **includes urban, ag and rural residential land uses**

Watershed (if known) See Map:

Project Cost Range: **$1M-$5M**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Planning Phase**

Describe status of permitting: **Program projects are at various stages of planning and permitting.**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **National Fish and Wildlife Foundation, Urban Stream Restoration Program, CDFW Fisheries Restoration Grant Program**

What is the Percent Range of Matching Funds? **>51%**

Does Project Serve a Disadvantaged Community (DAC)?

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

The tributary LID project improves stormwater quality

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The City of Pismo Beach, the Coastal San Luis RCD, CCSE and State Parks have been cooperating on various of the proposed project slate.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Other Comments:

Raising Santa Margarita Dam

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS) (predecessor to future California Water District)**

Contact Name: **Jerry Reaugh, Board President**

Affiliation: **Paso Robles Agriculture Alliance for Groundwater Solutions**

Address: **P. O. Box 1499, Paso Robles, CA 93447** Phone Number: **(805) 440-7300**

Email: **jerry@reaughj.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Santa Margarita Dam, constructed in 1941 by the U.S. War Department, has a crest height, was never completed to allow for full storage because the spillway gate(s) was left off the ogree spillway crest. The Project would involve evaluation of alternatives to upgrade the dam to meet California DSOD safety guidelines, and install spillway crest gates to increase the water conservation storage capacity of the reservoir.

Describe Need for Project/Program (1 to 2 sentences):

The Paso Robles Groundwater Basin is recharged by flows within the Salinas River, and the Santa Margarita Dam is located on the river upstream of the Basin. The additional storage held as water conservation and released during the summer_fall seasons to recharge both the alluvium and Paso Robles formations. Furthermore, other infrastructure will be considered to divert the water conservation flows to areas of need east of the river.

Project Website (if any):

n_a

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions: **North and South County Subregions**

Nearest Cross Street or Street Address: **Santa Margarita Reservoir on Salinas River off of Pozo Road**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban, Agricultural, Rural Residential, Golf Courses**

Watershed (if known) See Map: **Salinas**

Project Cost Range: **>$5M**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Conceptual**

Describe status of permitting: **n_a**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

n_a

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **Grants and Bonds**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **San Luis Obispo**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Additional water will be conserved behind the dam because it has greater storage once the gates are installed. The operations of the dam will be re-operated to improve the delivery of conserved water. Water will be conveyed from the reservoir into the Paso Robles Groundwater Basin for recharge of the Basin.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes, the existing dam will be improved. The existing outlet structures, which are original with the 1941 dam, will be modernized. The existing pipeline from the dam to the Booster Pump Station will be evaluated and considered as flowing water from the Nacimiento Water Project back to the Santa Margarita Lake to 'bank' the Nacimiento water reservoir. The Project will also include improving the existing ogee spillway by installing crest gates. And the project will include modifications to the dam as necessary to upgrade the structure to meet DSOD dam safety guidelines.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The improvements will be a vast improvement to the efficient use of water in the North County because more runoff water that normally flows to the ocean will be captured as conservation water. The project can potentially store Nacimiento Water and perhaps dechlorniated State Water Project water. Reoperaiton of the dam will provide a flow of water into the alluvium during the summer_fall period when typically releases are set at zero.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Improvements to water quality are not fully understood at this time.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

The project may improve riparian habitat and may provide longer active flow in the main stem of the Salinas River.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

The essential purpose of implementing the project is to improve the groundwater management of the Paso Robles Groundwater Basin. The water conserved behind the dam can be delivered to the Basin and supplement the natural recharge and the better balance the basin inflow during dry periods.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

It is predicted tha the project will improve flood management through the SLO County communities downstream of the dam because uncontrolled discharges will no longer flow from the reservoir once the gates are installed upon the dam.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

The project will certainly be an integrated collabroative project between SLO Cities and communities and the agricultural region in the North County.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

The DAC of San Miguel and San Luis Obispo will benefit. San Miguel will benefit from the release of conserved water into the alluvium during the typical summer_fall dry seasons. San Luis Obispo will benefit from improvements and protection of their existing water rights with the dam safety improvements to the dam.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

At this time climage change elements are not considered to be measurable.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The partnership that is expected to collabratively work together includeds the City of San Luis Obispo, the County Flood Control and Water Conservation District, the City of Paso Robles, Atascadero Mutual Water Company, and CSD's along the river downstream of the dam.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Not implemnting the project will put the currently permitted Salinas River diversion at risk if no entity takes benefical use of the potential storage behind the dam. The conserved water will be used to supplement the groundwater storage of the Paso Robles Groundwater Basin to keep the Basin in balance with the annual safe yield which during the dry drought periods typically results a significant decrease in the change in storage.

Other Comments:

The Santa Margarita Dam is an extremely important hydraulic structure within the North County, and for 72 years this asset has been under utilized with regarding to its potential to conserve water for additional and supplemental use during dry period. The time has come where a collaborative effort can result in taking advantage of this existing hydraulic structure.

Rancher 2 Rancher Program

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **Coastal San Luis Resource Conservation District**

Contact Name: **Nicole Smith**

Affiliation: **Conservation Programs Manager**

Address: **645 Main St., Suite F, Morro Bay, CA 93442** Phone Number: **805-772-4391**

Email: **nsmith@coastalrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The Rancher 2 Rancher Program will utilizing the knowledge of progressive ranchers to share their experiences implementing best management practices with other local ranchers leading to improved implementation rates of good grazing practices. The Program is successfully implemented in other parts of California. It is tied to land management and BMPs that reduce climate change impacts.

Describe Need for Project/Program (1 to 2 sentences):

Large portions of our County are ranch and grazing lands. We do not have a consistent grazing program in place that supports ranchers through technical and funding assistance.

Project Website (if any):

nsmith@coastalrcd.org

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions: **Countywide**

Nearest Cross Street or Street Address: **N_A**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **agriculture**

Watershed (if known) See Map: **all watersheds**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Planning Phase**

Describe status of permitting: **N_A**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

N_A

Estimated ProjectStart Date: **7/6/1905**

Estimated ProjectEnd Date: **7/9/1905**

Identify proposed funding sources: **IRWM, in-kind contributions and potential grant funding. If the project is accepted into the regional grant additional work can be completed to produce a line item budget and estimate contributions.**

What is the Percent Range of Matching Funds? **<10%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes indirectly

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes indirectly

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

No

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes indirectly

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood

control projects, system operations, stream/floodplain restoration, etc.)?

Yes indirectly

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

We will work with the USLT RCD, Natrual Resource Conservation Service, UC Cooperative Extension and Cattleman_woman's .

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Other Comments:

Recycle Water Distribution System Expansion

South County

Sponsoring Agency/Organization: **City of San Luis Obispo**

Contact Name: **Wade Horton**

Affiliation: **City of San Luis Obispo**

Address: **919 Palm St, San Luis Obispo, CA 93401** Phone Number: **whorton@slocity.org**

Email: **gray@grover.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **No**

Provide a Brief Project/Program Description (1 to 2 sentences):

Extend the recycled water distribution system from the City's existing main on Madonna Road approximately 2,000 feet to serve CL Smith Elementary School. The site, which currently uses approximately 12 acre feet annually of potable water for landscape irrigation, was identified as a priority connection as it is located proximate to an existing backbone recycled water main.

Describe Need for Project/Program (1 to 2 sentences):

The City estimates demand exists for approximately 1,000 acre feet of recycled water for landscape irrigation. Approximately 400 acre feet of this demand will be realized from extending the recycled water distribution system to serve the landscape irrigation of existing development in the City similar to this project.

Project Website (if any):

The City's Utilities Department website is: www.slocity.org_utilities

Subregion (See Map) **South County**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **CL Smith Elementary, 1375 Balboa Street**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Public Facility**

Watershed (if known) See Map: **San Luis Obispo, Avila**

Project Cost Range: **$250K-$500K**

Project Cost (if known): **$400,000**

Source of Cost Estimate: **Agency**

Project Status: **Ready for Implementation**

Describe status of **Final coordination with San Luis Coastal Unified School District to be**

permitting: **completed prior to construction.**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Completed

Estimated ProjectStart Date: **1/1/2014**

Estimated ProjectEnd Date: **6/30/2014**

Identify proposed funding sources: **Water Fund**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **San Luis Obispo**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes. Recycled water increases water conservation and reuses water for landscape irrigation.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes. The City's General Plan Water and Wastewater Management Element includes goals include utilizing recycled water for non-potable purposes, thereby offsetting the use of potable water and maximizing the use of the City's available recycled water supply for approved uses. The project to extend the City's distribution system to serve CL Smith Elementary School will result an offset of 12 acre feet of potable water -- enough to serve the total potable water needs of 30 residences for a year.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes. This project recycles water, thereby increasing water supply and storage, in event of a drought.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

No.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

No.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

No.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. This project encompasses urban water management plans, and adheres to water meter requirements, AB 1420, BMP and CEQA compliances.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

N_A

Describe what impacts, if any, will occur if the Project/Program is not implemented:

CL Smith Elementary School currently uses approximately 12 acre feet annually potable water for landscape irrigation. The site was identified as a priority connection as it is located proximate to an existing backbone recycled water main. The City's General Plan Water and Wastewater Management Element includes goals include utilizing recycled water for non-potable purposes, thereby offsetting the use of potable water and maximizing the use of the City's available recycled water supply. The City has been delivering recycled water since 2006 and delivered approximately 165 acre feet in 2012.

Other Comments:

Recycled Water Treatment and Distribution System - Phase 1

North County

Sponsoring Agency/Organization: **City of Paso Robles**

Contact Name: **Christopher Alakel**

Affiliation: **City of Paso Robles**

Address: **1000 Spring St., Paso Robles, California 93446** Phone Number: **805-237-3861**

Email: **calakel@prcity.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **No**

Provide a Brief Project/Program Description (1 to 2 sentences):

The project involves the construction of the first phase of a recycled water treatment and distribution system to provide tertiary treated, Title 22 water for delivery to irrigation users located within the City of Paso Robles and outside the City. The facilities to be constructed include tertiary filters, pump stations, chemical feed system, recycled water storage, and approximately 4,800 feet of 24' recycled water transmission main. The transmission main will be over-sized to provide in the future up to 4.9 million gallons per day of recycled water supply at the City's target buildout population of 44,000. The Phase 1 project will be capable of providing an estimated 0.86 MGD of water to meet summertime irrigation demand in the Phase 1 service area. Phase 2 and 3 of the system would be constructed at a later time and when completed, would be capable of providing up to 4.9 MGD of water.

Describe Need for Project/Program (1 to 2 sentences):

The City of Paso Robles lies within the highly stressed Paso Robles Groundwater Basin. The City's wastewater treatment plant currently produces about 3,300 AF_YR of water that could be treated to tertiary standards and made available for irrigation of schools, parks, roadway landscaping, as well as golf courses and agricultural lands now supplied by private wells along the periphery of the City's east side. At the City's target buildout population of 44,000, an estimated 5,400 AF_YR of recycled water could be made available to irrigation users. The recycled water supply will offset groundwater pumping by the City and private wells owners providing benefits to all groundwater users in the Paso Robles groundwater basin.

Project Website (if any):

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **North County Region**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban, Agricultural.**

Watershed (if known) See Map: **Salinas**

Project Cost Range: **>$5M**

Project Cost (if known):

Source of Cost Estimate: **Engineer**

Project Status: **Planning Phase**

Describe status of permitting: **Not yet begun**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Not yet begun

Estimated ProjectStart Date: **1/1/2018**

Estimated ProjectEnd Date: **1/1/2019**

Identify proposed funding sources: **To be determined**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **Paso Robles**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes. The project would be the first phase in developing a significant new supplemental water supply for the highly stressed Paso Robles Groundwater Basin.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes. The project will provide improvements to existing water supplies, increasing water supply reliability for water customers of the City of Paso Robles, area golf courses, agricultural water users, and rural residents in the basin.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The project will improve water supply reliability within the City of Paso Robles and for all groundwater users within the Paso Robles Basin.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes the project will result in improved water quality in the Salinas River. The project will reduce the quantity of wastewater discharged to the river, reducing the discharge of salts and nutrients to the river.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. The project will result in improved water quality within the Salinas River by reducing the discharge of effluent high in TDS.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. The project will produce environmental benefits through improved Salinas River water quality.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. The project will involve the use of recycled water by golf, agricultural and other entities outside the City of Paso Robles now supplied by private wells. Therefore, it will facilitate collaboration among urban, agricultural, commercial, and rural residential interests.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes. Paso Robles has been designated as a disadvantaged community.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The project will likely involve cooperative agreements between the City of Paso Robles and agricultural interests, golf interests, and potentially a future Paso Robles Groundwater Basin Management District.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the project is not implemented, a very significant supplemental water supply within the Paso Robles Groundwater Basin will remain underutilized.

Other Comments:

The City of Paso Robles is in the process of completing a recycled water system master plan that recommends a future recycled water distribution system to serve current and future irrigation uses within the City's east side and agricultural and golf users on the City's periphery. The primary challenge for Paso Robles in implementing a recycled water program that will benefit the groundwater basin is the high capital

cost of the planned treatment and delivery system. This challenge is highlighted by the fact that the great majority of the potential demand for recycled water is by users now supplied by private wells and located outside city limits. Therefore, grant funding and financial participation from outside entities will be critical in implementing the system.

Recycled Water Treatment and Distribution System - Phases 2_3

North County

Sponsoring Agency/Organization: **City of Paso Robles**

Contact Name: **Christopher Alakel**

Affiliation: **City of Paso Robles**

Address: **1000 Spring St., Paso Robles, California 93446** Phone Number: **805-237-3861**

Email: **calakel@prcity.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **No**

Provide a Brief Project/Program Description (1 to 2 sentences):

The project involves the construction of the second and third phases of a recycled water treatment and distribution system to provide tertiary treated, Title 22 water for delivery to irrigation users located within the City of Paso Robles and outside the City. The facilities to be constructed include tertiary filters, pump stations, chemical feed system, recycled water storage, and approximately 34,800 feet of 24' through 10' recycled water transmission main. The Phase 2_3 recycled water system will be sized to provide up to 4.9 million gallons per day of recycled water supply at the City's target buildout population of 44,000.

Describe Need for Project/Program (1 to 2 sentences):

The City of Paso Robles lies within the highly stressed Paso Robles Groundwater Basin. The City's wastewater treatment plant currently produces about 3,300 AF_YR of water that could be treated to tertiary standards and made available for irrigation of schools, parks, roadway landscaping, as well as golf courses and agricultural lands now supplied by private wells along the periphery of the City's east side. At the City's target buildout population of 44,000, an estimated 5,400 AF_YR of recycled water could be made available to irrigation users. The recycled water supply will offset groundwater pumping by the City and private wells owners providing benefits to all groundwater users in the Paso Robles groundwater basin.

Project Website (if any):

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **North County Region**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban, Agricultural.**

Watershed (if known) See Map: **Salinas**

Project Cost Range: **>$5M**

Project Cost (if known):

Source of Cost Estimate: **Engineer**

Project Status: **Planning Phase**

Describe status of permitting: **Not yet begun**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Not yet begun

Estimated ProjectStart Date: **1/1/2025**

Estimated ProjectEnd Date: **1/1/2027**

Identify proposed funding sources: **To be determined**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **Paso Robles**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes. The project would be the first phase in developing a significant new supplemental water supply for the highly stressed Paso Robles Groundwater Basin.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes. The project will provide improvements to existing water supplies, increasing water supply reliability for water customers of the City of Paso Robles, area golf courses, agricultural water users, and rural residents in the basin.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The project will improve water supply reliability within the City of Paso Robles and for all groundwater users within the Paso Robles Basin.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes the project will result in improved water quality in the Salinas River. The project will reduce the quantity of wastewater discharged to the river, reducing the discharge of salts and nutrients to the river.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. The project will result in improved water quality within the Salinas River by reducing the discharge of effluent high in TDS.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. The project will produce environmental benefits through improved Salinas River water quality.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. The project will involve the use of recycled water by golf, agricultural and other entities outside the City of Paso Robles now supplied by private wells. Therefore, it will facilitate collaboration among urban, agricultural, commercial, and rural residential interests.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes. Paso Robles has been designated as a disadvantaged community.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The project will likely involve cooperative agreements between the City of Paso Robles and agricultural interests, golf interests, and potentially a future Paso Robles Groundwater Basin Management District.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the project is not implemented, a very significant supplemental water supply within the Paso Robles Groundwater Basin will remain underutilized.

Other Comments:

The primary challenge for Paso Robles in implementing a recycled water program that will benefit the groundwater basin is the high capital cost of the planned treatment and delivery system. This challenge is highlighted by the fact that the great majority of the potential demand for recycled water is by users now supplied by private wells. Therefore, grant funding and financial participation from outside entities will be critical in implementing the system.

Regional Implementation of Groundwater Management Activities

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **Various (depends on basin)**

Contact Name: **Courtney Howard**

Affiliation: **County of San Luis Obispo**

Address: **County Government Center, Rm 207, San Luis Obispo, CA 93408**

Phone Number: **(805) 781-1016**

Email: **choward@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Implementation of groundwater management activities would be guided by each groundwater basin management plan or similar guiding document. Efforts would focus on priority basins in SLO County IRWM Region, and would include implementation activities listed in each basin's groundwater management plan, such as, groundwater monitoring, demand management, best management practices, water conservation or other methods best suited for that basin.

Describe Need for Project/Program (1 to 2 sentences):

Many of the communities in the region are partially or solely dependent on one of the 25 local groundwater basins, many of which face challenges such as declining levels due to increasing demands and_or water quality degradation (nitrates, seawater intrusion, geothermal, or other). Groundwater basin management will require some combination of management activities in order to remedy the water quality issues and_or supplement or replenish the groundwater available.

Project Website (if any):

N_A

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions: **Could include priority groundwater basins in any of the three Sub-Regions.**

Nearest Cross Street or Street Address: **N_A**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Various**

Watershed (if known) See Map: **Various**

Project Cost Range:

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Conceptual**

Describe status of permitting: **Various (depends on basin)**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Various (in some cases N_A)

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **Will identify once priority implementation activities are identified**

What is the Percent Range of Matching Funds? **<10%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes. Some of the primary means of stabilizing declining groundwater basin levels will be achieved through conservation and best management practices_ water use efficiency in the urban, rural and agricultural use sectors. Implementation activities would likely include developing and implementing conservation programs, measures and practices to increase water use efficiency and maximize water supplies.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes. Implementing groundwater management activities focuses on creating sustainable groundwater use whether by implementing best management practives, demand management, and_or conservation measures.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

No.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes. By focusing on stabilizing declining groundwater levels, groundwater quality can be protected or improved. For example, by stabilizing declining groundwater levels, coastal aquifers can decrease the influence of seawater intrusion on water quality.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship,

ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Potentially. Groundwater management activities could include demand management depending on each basin's needs, which could include land use management by way of ordinances and policies related to rural, agriculture, and urban users, as well as new developments.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. The objective of a Regional Implementation of Groundwater Management Activities program would be to improve groundwater management in priority basins. The activities implemented would depend on the guiding groundwater management document in each priority basin, but might include activities such as, groundwater monitoring, demand management, best management practices, water conservation or other methods.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Yes. Several implementation activities could include implementation of low impact development and_or groundwater recharge projects, providing flood management in priority basins (where appropriate).

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. This program could help to instill a collaborative approach to water management between the rural, urban, and agricultural user sectors. It could also support education related to best management practices and conservation methods.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Potentially. This will depend on the priority groundwater basin where activities are being implemented. There are four disadvantaged communities indicated by the State DWR: San Simeon (overlying the Pico Creek Valley Groundwater Basin), San Miguel (overlying the Paso Robles Groundwater Basin), City of San Luis Obispo (overlying the San Luis Obispo Valley Groundwater Basin and its sub-basins), and Oceano (overlying the Santa Maria Valley Groundwater Basin).

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes. Low impact development and groundwater recharge projects would increase the groundwater available, thereby offsetting a portion of the new imported water supply sources required to stabilize basin levels and meet water demands. This would reduce the amount of water imported, and the energy needed to convey the imported water.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

This will depend on the priority groundwater basin implementing activities. Partnerships may be necessary depending on who benefits from the implementation of groundwater management activities.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If groundwater management activities are not implemented, priority groundwater basins will continue to see the current (if not worsening) water quality issues, declining levels, and other issues with overall basin management.

Other Comments:

This regional program would be further defined by the groundwater management planning efforts in priority basins throughout the SLO County IRWM Region.

Regional Recycled Water System (Pismo Beach and SSLOCSD)

South County

Sponsoring Agency/Organization: **City of Pismo Beach**

Contact Name: **Benjamin Fine**

Affiliation: **City of Pismo Beach**

Address: **760 Mattie Road, Pismo Beach, CA 93449** Phone Number: **805-779-1201**

Email: **bfine@pismobeach.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Based on the results of the Regional Recycled Water Strategic Plan currently being developed, develop a recycled water system that includes the City of Pismo Beach Wastewater Treatment Plant and South San Luis Obispo County Sanitation District (SSLOCSD) Wastewater Treatment Plant (Regional Recycled Water System). A Regional Recycled Water System would allows the SSLOCSD member agencies and the City of Pismo Beach to diversify their water supply portfolios, reduce reliance on surface water imports and groundwater pumping, reduce the discharge of treated wastewater to the Pacific Ocean, and develop a collaborative approach to resolving the region's water resources limitations.

Describe Need for Project/Program (1 to 2 sentences):

A Regional Recycled Water System is needed to improve the long-term sustainability of South County water resources, especially during times of reduced SWP deliveries and limited groundwater recharge.

Project Website (if any):

Subregion (See Map) **South County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **760 Mattie Road, Pismo Beach, CA 93449**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Multiple**

Watershed (if known) See Map: **Five Cities**

Project Cost Range: **>$5M**

Project Cost (if known):

Source of Cost Estimate: **Engineer**

Project Status: **Conceptual**

Describe status of **Pending**

permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Pending

Estimated ProjectStart Date: **4/1/2015**

Estimated ProjectEnd Date: **4/1/2019**

Identify proposed funding sources: **Round 3 IRWM Implementation Grant**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes, the project would utilize new recycled water supply sources for the following, but not limited to, uses: landscape irrigation_ agriculture irrigation_ industrial uses_ seawater intrusion barrier_ stream flow augmentation_ groundwater recharge_ etc.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes, the project would augment existing water supply availability and increase reliability by supplying non-potable uses that are currently served with potable water.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes, the project would augment existing water supply availability and increase reliability, including drought preparedness, by supplying non-potable uses that are currently served with potable water.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes, the use of recycled water use would have to comply with the water quality requirements of the CCRWQCB's Basin Plan and could be used to prevent seawater intrusion.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Recycled water could be used for stream flow augmentation or to offset extractions from surface water and groundwater sources. This would provide additional water for ecosystem restoration and_or environmental water demands.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring,

banking/recharge, etc.)?

Yes, groundwater basin monitoring and management would be an integral part of a Regional Recycled Water System. Additionally, a Regional Recycled Water System would provide a source of supply for groundwater banking and recharge.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes, implementation of a Regional Recycled Water System would include extensive public outreach, stakeholder collaboration and consumer education.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes, the community of Oceano would benefit from enhanced groundwater supply reliability.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes, a Regional Recycled Water System could be utilized to reduce the impacts of sea level rise through the development of a seawater intrusion barrier. Additionally, reclaiming locally produced wastewater may produce lower greenhouse gas emissions than importing addition State Water Project Water.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The project stakeholders would include water agencies, wastewater agencies, agricultural interests, recycled water producers, private well owners, environmental groups, regulatory agencies and the general public.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If this project is not implemented, wastewater generated by Pismo Beach and the SSLOCSD member agencies will continue to be discharged to the ocean and not utilized to improve the water supply reliability for the South County Sub-Region.

Other Comments:

Rehabilitation_Installation of Retention Ponds in North Coast (store & release)

North Coast

Sponsoring Agency/Organization: **Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)**

Contact Name: **Laura Edwards**

Affiliation: **Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)**

Address: **65 South Main Street, Suite 107, Templeton, CA 93465** Phone Number: **805-434-0396 x 5**

Email: **laura@us-ltrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Maybe**

Provide a Brief Project/Program Description (1 to 2 sentences):

Create water retention basins along streams in North Coast Watersheds. Identify where groundwater recharge opportunities exist.

Describe Need for Project/Program (1 to 2 sentences):

Documented lack of water resources in North Coast communities. Heavy winter rains flow directly to Pacific Ocean. Increasing water quality will improve riparian habitats and offset climate change water quality concerns.

Project Website (if any):

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address:

Land Use (e.g., urban, ag, rural residential etc.) See Map: **varies: urban, agricultural, rural**

Watershed (if known) See Map: **Big Creek, San Simeon, Cambria, Cayucos Creek**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Conceptual**

Describe status of permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources:

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **San Simeon**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Groundwater storage, stormwater management

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Water supply management, sustainability of agricultural, rural and urban supplies.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Drought preparedness

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Improve groundwater conditions to improve water quality for agricultural water supplies.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Ecosystem restoration, recharge area protection, river_stream flow management

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Understanding of groundwater basin, overdraft threat, banking_recharge

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Watershed management, flood control project, stream_flood plain restoration

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Collaboration among urban, agricultural, rural and environmental interests

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Watershed management, critical water quality, flood control

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Agencies and local water boards, steelhead and land conservationists

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Restricted growth of North Coast agriculture and urban development. Impacts to riparian habitats as water quality decreases. More pressure on existing water supplies.

Other Comments:

San Miguel Community Services District Water System Improvements - Disadvantaged Community

South County

Sponsoring Agency/Organization: **San Miguel Community Services District - Disadvantaged Community**

Contact Name: **Rene Salas, General Manager**

Affiliation: **San Miguel CSD**

Address: **1150 Mission Street, San Miguel, CA 93451** Phone Number: **(805)467-3300**

Email: **rsalas@sanmiguelcsd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **No**

Provide a Brief Project/Program Description (1 to 2 sentences):

Provide various water system improvements to the community of San Miguel, to improve water supply reliability and to improve water quality to ensure the public health and safety of the community.

Describe Need for Project/Program (1 to 2 sentences):

The identified projects will address the issues of water supply reliabiltity, improved public safety by providing adequate fire flows (replacing undersized water mains, improving system looping for better water circulation, adding water storage for public safety), and water quality issues (inadequate health separation from sanitary sewers, improved water quality to address radiounuclides and arsenic in the existing water supply, new water supply well to address both water supply reliability and water quality issues).

Project Website (if any):

Subregion (See Map) **South County**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address:

Land Use (e.g., urban, ag, rural residential etc.) See Map:

Watershed (if known) See Map:

Project Cost Range: **$500K-$1M**

Project Cost (if known): **$950,000**

Source of Cost Estimate:

Project Status:

Describe status of permitting: **To acquire during design, 0% Complete, Estimated Completion Date: 3_15_13**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Cat Ex, 0% Complete, Estimated Completion Date: 12_31_12

Estimated ProjectStart Date: **1/15/2013**

Estimated ProjectEnd Date: **3/15/2014**

Identify proposed funding sources: **Grant**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **San Miguel**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Well 3 rehabilitation, the addition of more storage, water distribution system imrpovements and addition of backup water supply will significantly improve the reliability of the drinking water supply, to deliver water to customers and to ensure adequate fire safety.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Implementing a toilet retrofit program will reduce water demand and thus reduce pumping demand on the Paso Robles Groundwater Basin.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Improvements to Well 3, Well 4, and the SLT well will address issues of radionuclides and arsenic in the water supply, where the existing water quality exceeds or threatens to exceed primary MCLs. A new well siting study is needed to identify the best location for a new municipal water supply well, improving water quality and reliablity of the drinking water supply.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

The water system improvements will allow a continued level of service to accommmodate existing land use_zoning in the San Miguel CSD service area.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

This is an area-wide benefit project activity to protect public health and safety, and reduce ongoing maintenance costs to the District serving residents of Census Tract 100.3, who are 56% low and moderate income per 2000-2003 HUD Census Data.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

N_A

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Other Comments:

San Miguel Flood Control Program

Sponsoring Agency/Organization: **San Luis Obispo County Flood Control and Water Conservation District**

Contact Name: **Jill Ogren, PE**

Affiliation: **San Luis Obispo County Public Works**

Address: **County Government Center, Room 206, San Luis Obispo, CA 93408**

Phone Number: **805.781.5263**

Email: **jogren@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **No**

Provide a Brief Project/Program Description (1 to 2 sentences):

The San Miguel Flood Control Program includes implementation of Phase 1 involving an underground storm drain system followed by Phase 2 which involves construction of a continuous curb and gutter system. Storm water collection facilities (i.e. drainage pipes, ditches, etc.) are proposed to be constructed within 16th, 11th, 12th, and N Streets. A continuous curb and gutter system is proposed to be constructed throughout the community to mitigate residential flooding and provide positive gutter flow to collection facilities constructed in Phase 1.

Describe Need for Project/Program (1 to 2 sentences):

San Miguel lacks a formal drainage system which causes flooding problems throughout the community. The primary cause of flooding in San Miguel is due to the absence of a continuous positive slope and drainage conveyance path from the west side of town to the Salinas River. The railroad runs through town and serves as a barrier to storm runoff flowing from the west side of it to the Salinas River.

Project Website (if any):

Subregion (See Map)

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **San Miguel, CA**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **residential, commercial and industrial**

Watershed (if known) See Map:

Project Cost Range: **$1M-$5M**

Project Cost (if known): **$4,142,000**

Source of Cost Estimate: **Agency**

Project Status: **Conceptual**

Describe status of

permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **funding sources are currently being pursued**

What is the Percent Range of Matching Funds? **<10%**

Does Project Serve a Disadvantaged Community (DAC)? **San Miguel**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Opportunities exist to enhance the design fro improvement to stormwater quality discharge and groundwater recharge to support implementation of TMDL and stormwater programs, and the California NPS Plan to increase the benefits and funding potential.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

The San Miguel Flood Control Program implements an overall plan to collect and convey runoff in an organized fashion to the Salinas River. The plan includes a system of curbs, gutters, drop-inlets, constructed ditches, and underground storm drainage pipes.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local

control, etc.)?

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Implementation of the program will provide ugently needed flood protection for the disadvantaged community of San Miguel.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Frequent ponding and shallow flood occurs at several locations in the community of San Miguel. Without implementation of flood control improvements, there is serious flooding on the west side of the Union Pacific Railroad tracks especially in the vicinity of Mission Street between 11th and 16th Streets as well as continued flooding and drainage problems in some residential areas.

Other Comments:

The River Road Storm Drain was completed in September 2009. This project provided for the construction of a new 48-inch storm drain culvert and multiple inlet improvements within the 14th Street and River Road right of way, from just west of Mission Street running easterly to its outlet in the Salinas River. This improvement is intended to reduce area flooding within the San Miguel commercial area along Mission Street. The project is the keystone segment of the above described flood control program. The total project cost was $1,752,743 and was funded by a Community Development Block Grant from the U.S. Department of Housing and Urban Development.

Santa Maria Groundwater Basing Groundwater Flow Model

South County

Sponsoring Agency/Organization: **NCMA Agencies (Oceano Community Services District, Cities of Arroyo Grande, Grover Beach and Pismo Beach)**

Contact Name: **Teresa McClish**

Affiliation: **City of Arroyo Grande**

Address: **300 E Branch Street Arroyo Grande, CA 93421** Phone Number: **(805) 473-5420**

Email: **tmcclish@arroyogrande.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Develop a computational groundwater flow model and perform modeling analysis for the Santa Maria Groundwater Basin (SMGB) to: establish safe yield estimates for SMGB_ develop strategies to prevent seawater intrusion_ analyze impacts of localized pumping and develop alternative pumping strategies to improve the long-term sustainability_ and evaluate the potential for groundwater storage_conjunction use programs for the basin. This project is a continuation of the SMGB Characterization project currently being completed as part of the San Luis Obispo County IRWM Planning Grant to improve the understanding of the hydrogeology and geology of the SMGB. The groundwater model will also be developed in coordination with the proposed Salt and Nutrient Management Plan for the San Luis Obispo County portion of the SMGB.

Describe Need for Project/Program (1 to 2 sentences):

The groundwater is one of the primary or the only source(s) of supply for the agencies that overly the SMBG and this project will provide these agencies with an improved understanding of the movement of groundwater within the basin and a tool to better evaluate water resource management alternatives.

Project Website (if any):

Subregion (See Map) **South County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address:

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban, Ag, Rural, Etc.**

Watershed (if known) See Map: **5 Cities, Nipomo Mesa**

Project Cost Range: **$500K-$1M**

Project Cost (if known):

Source of Cost Estimate: **Engineer**

Project Status: **Planning Phase**

Describe status of permitting: **Pending**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Pending

Estimated ProjectStart Date: **7/1/2014**

Estimated ProjectEnd Date: **12/1/2016**

Identify proposed funding sources: **IRWM Planning Grant**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes, the groundwater flow model will enable the agencies within the SMGB to re-evaluate or establish safe yield estimates and determine if additional water can be extracted or if changes in pumping location_timing could improve the sustainability of the groundwater supply.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Improving the understanding of the groundwater storage and movement within the SMGB will enable the overlying agencies to improve their management of this essential water supply resource. A groundwater model will enable to these agencies to: identify the safe yields for the different portions of SMGB_ develop strategies for avoiding seawater intrusion_ evaluate groundwater storage_conjunctive use programs_ etc.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The groundwater model can be utilized as an operational tool to more efficiently manage pumping within the basin. By analyzing areas of groundwater recharge, confining layers, ocean outflow requirements and groundwater storage there may be opportunities to manage_relocate pumping within the basin to increase yield and better protect against seawater intrusion.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

With a better understanding of groundwater flow within the basin, the managing agencies will be able to evaluate salt and nutrient loading and transport and develop management strategies to reduce the accumulation of these water quality constituent within the basin. Additionally, the groundwater flow model will enable the managing agencies to evaluate pumping within the basin and identify areas where pumping may increase the risks of seawater intrusion.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

One of the key components of the groundwater model will include the evaluation of recharge of the groundwater basin from surface water bodies. A better understanding of the relationship between creek flows and groundwater levels help local agencies balance urban, agriculture and environmental water requirements.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

This primary purpose of this project is to improve groundwater management. The development of a groundwater flow model will enable the agencies within the SMGB to meet the following objectives: quantify groundwater yield and storage_ evaluate banking_recharge programs, update and improve groundwater monitoring plans_ prevent seawater intrusion_ etc.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Utilizing the updated understanding of the hydrology of the SMGB, agencies will be able to better coordinate and develop programs amongst a wide variety of stakeholders to improve water resources management.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

The groundwater model will encompass the area of the SMGB that underlies the community of Oceano, which is one of the critical sources of supply for this Disadvantaged Community.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

One potential application of the groundwater model, would be to evaluate pumping within the basin from an efficiency perspective. This evaluation could identify more efficient areas within the basin for extracting groundwater and limiting pumping costs and greenhouse gas emissions.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

This project will include participation by the Oceano Community Services District and the Cities of Arroyo Grande, Grover Beach, Pismo Beach. Additionally, depending on ultimate extent of the groundwater model, it may include the Nipomo Mesa Management Area (NMMA) or the entirety of the SMGB, which

extends into Santa Barbara County. In either case, this project will require extensive coordination with the groundwater managing agencies within in the NMMA and the Santa Barbara IRWM Region.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If this project is not implemented, the managing agencies within the SMGB will continue to rely upon the groundwater as their only or one of their primary source(s) of supply, while possessing limited understanding of the groundwater movement within the basin, the safe yield of the basin or the potential risk from seawater intrusion. Additionally, these agencies will not possess sufficient information to adequately evaluate the potential for groundwater storage_conjunctive use within the SMGB.

Other Comments:

See Canyon Watershed Management Plan

South County

Sponsoring Agency/Organization: **Central Coast Salmon Enhancement**

Contact Name: **Steph Wald**

Affiliation:

Address: **229 Stanley Ave.** Phone Number: **805-471-3789**

Email: **steph@centralcoastsalmon.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The See Canyon Watershed Management Plan will generate a water quality, water quantity and habitat protection plan for the See Canyon (San Miguelito) watershed, the most downstream triburary of the San Luis Obispo Creek watershed, and the most productive Steelhead trout tributary in the watershed. The project will assess existing watershed conditions and use a stakeholder driven approach to understand critical issues facing the watershed and vet recommendations for addressing those issues.

Describe Need for Project/Program (1 to 2 sentences):

See Canyon_San Miguelito Creek has not been the recipient of a focused watershed planning effort to date. Water resource protection is needed as development occurs that is protective of limited ground and surface water supplies.

Project Website (if any):

Subregion (See Map) **South County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **San Luis Bay Drive and See Canyon Road_**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Rural, agricultural and open space**

Watershed (if known) See Map: **San Luis Obispo**

Project Cost Range: **<$250K**

Project Cost (if known): **$125,000**

Source of Cost Estimate: **Agency**

Project Status: **Conceptual**

Describe status of permitting: **n_a**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

n_a

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **California Department of Fish and Wildlife Fisheries Restoration Grant Program, State Coastal Conservancy Climate Ready Program**

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)?

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

The project could identify recommendations for increases in water conservation.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

The project could identify recommendations for improvements to existing water supplies.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

The project will expand environmental and resource stewardship, ecosystem restoration, public education, endangered species restoration, invasive species reduction and stream flow management.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

The project could identify recommendations for improvements to groundwater management.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

The project could identify recommendations for improvements to flood management.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education,

collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

The project would conduct public outreach and education for watershed landowners involving them in a collaborative process to consider critical watershed issues.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

The project would use the recently published (April, 2013) Water-Energy Toolkit for Sustainable Development to provide climate change resources to watershed landowners.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Partner with the Coastal San Luis RCD to leverage their existing program offerings to make available to landowners to implement BMPs, and permit streamlining potential through Partners in Restoration and Livestock and Land Programs. The City of San Luis Natural Resources Program is interested in protecting steelhead resources of this productive subwatershed and would particpate as a stakeholder. Many landowners were involved in the existing watershed group (see comments below) and would presumably become involved once a funding source is procured to continue a watershed planning process.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

As the See Canyon and Davis Canyon watersheds continue to develop, the existing water resources and ecosystem attributes may continue to decline without adequate landowner outreach and technical support for water quality_quantity protection.

Other Comments:

CCSE was asked to initiate a watershed group in See Canyon in 2005 by several watershed landowners when they became concerned that groundwater overdrafting might negatively impacting base flow and dewatering the creek. CCSE has conducted well attended watershed forums for landowners and residents in the intervening years. A steering committee of landowners led a nascent watershed planning effort with CCSE providing administrative support funded through small contributions from supportive landowners. Funding this proposal would allow for continuing the process and to produce a plan that would serve as a blueprint for watershed management.

SLO Communities Water Enhancement Program

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **Central Coast Salmon Enhancement**

Contact Name: **Steph Wald**

Affiliation:

Address: **229 Stanley Ave., Arroyo Grande, CA 93420** Phone Number: **805-471-3789**

Email: **steph@centralcoastsalmon.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The SLO Communities Water Enhancement Program will augment decentralized water conservation and supply outcomes to leverage rainwater and grey water as a water supply source. It will include the following components: Rainwater catchment_harvesting rebate classes (water catchment systems for residential and rural users to include a class in order to be eligible to receive rebates), Slow It, Sink It, Spread It Campaign to reduce runoff, and increase infiltration, creation of LID Districts_Water Replenishing Districts, Community Curb Cut Program (inventory and implement residential curb cut program to reduce stormwater runoff and promote infiltration in appropriate places in urban and suburban communities) and planning_implementing winter runoff storage infrastructure to reduce or avoid pumping needs in summer for rural users.

Describe Need for Project/Program (1 to 2 sentences):

There is a need for a comprehensive county-wide program to provide education, outreach and technical support to implement programs to conserve rainwater in urban, rural and commerical_industrial land uses and increase groundwater basin recharge through grey water applications.

Project Website (if any):

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions: **County-wide**

Nearest Cross Street or Street Address:

Land Use (e.g., urban, ag, rural residential etc.) See Map: **potentially all land uses**

Watershed (if known) See Map: **potentially all watersheds**

Project Cost Range: **$250K-$500K**

Project Cost (if

known):

Source of Cost Estimate:

Project Status: **Conceptual**

Describe status of permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **municipal participation, National Fish and Wildlife Foundation, RWQCB SEP funds**

What is the Percent Range of Matching Funds? **26%-50%**

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

This project will enhance groundwater storage, reduce storm water flows and use captured water for urban and rural outdoor water needs (including landscape, livestock watering and gardening.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Capturing and using rainwater for urban users reduces the need for increasing costly centralized water supplies. Capturing and using rainwater for rural users reduces the need for groundwater draw for landscape and livestock. Plumbing greywater systems for urban and rural users improves groundwater recharge.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Provision of technical information for catchment and storage for rural and commercial users would improve local, decentralized operation and contribute to water supply reliability.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Capturing rainwater reduces the potential for erosion and sedimentation events which in turn reduces NPS pollution to surface and groundwater.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Increasing the knowledge base of rainwater_grey water use in urban and rural settings expands environmental and resource stewardship by more closely associating the user with the resource. This program is oriented toward public education and recharge area protection through watershed education and would be offered as one of CCSE's watershed education programs for the public.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

The project will include provision of information about how rainwater_grey water systems fit into the larger human water cycle protecting groundwater basins and reducing threats of overdraft. The project promotes local contributions to ground water management.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

The LID Districts_Water Replenishing Districts and community curb-cut program contribute to reducing flood risks, improving LID

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

The crux of the program is public outreach and education that can promote local control of water quality and quantity through a mix means of methods.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

All DACs would be included.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Partners include the Coastal San Luis RCD, the Upper Salinas-Las Tablas RCD, the California Conservation Corps, the SLO Steelhead Initiative (a collaboration of county-wide steelhead restoration groups), SLO Permaculture Guild, SLO Green Build, SLO Surfriders.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

There will continue to be a missed opportunity to increase water supply through low-cost and locally controlled, decentralized rainwater collections systems and increase groundwater recharge through low-cost and locally controlled, decentralized grey water systems. The LID district_water replenishing districts idea would not have an opportunity be further explored on a county-wide basis. Overall, water

inefficiencies will continue.

Other Comments:

Stormwater Rewards Rebate Program

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **Coastal San Luis Resource Conservation District**

Contact Name: **Nicole Smith**

Affiliation: **Coastal San Luis Resource Conservation District**

Address: **645 Main Street, Suite F, Morro Bay, CA 93442** Phone Number: **805-772-4391**

Email: **nsmith@coastalrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The Stormwater Rewards Program will provide rebates to urban landowners retrofitting their property with Low Impact Development practices that slow,spread, and sink stormwater runoff. Priority will be on highly impervious land uses.

Describe Need for Project/Program (1 to 2 sentences):

Stormwater management impacts our water supplies, water quality, flooding and creeks. Existing regulation addresses new development more than retrofiting existing development. The program would support implementation of practices as well as improving public understanding of stormwater.

Project Website (if any):

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **NA**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban**

Watershed (if known) See Map: **Multiple watersheds in the Coastal San Luis Resource Conservation District**

Project Cost Range: **$250K-$500K**

Project Cost (if known): **$300,000**

Source of Cost Estimate: **Agency**

Project Status: **Planning Phase**

Describe status of

permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

NA

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources:

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes, indirectly could improve water infiltration to groundwater supplies.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

No.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Yes.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

LID Initiative, RWQCB and municipalities

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Stormwater management programs will continue with limited funds directed to address regulation only.

Other Comments:

Estimated project cost provided above is dependent on scale.

Streambank Stabilization & Restoration in Santa Rosa Creek

North Coast

Sponsoring Agency/Organization: **Upper-Salinas Las Tablas Resource Conservation District (US-LT RCD)**

Contact Name: **Laura Edwards**

Affiliation: **US-LT RCD**

Address: **65 S. Main St. Ste 107** Phone Number: **805-434-0396 x5**

Email: **laura@us.ltrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **No**

Provide a Brief Project/Program Description (1 to 2 sentences):

Design and install bioengineered bank protection with Rock toe reinforcement along an unnamed tributary to Santa Rosa Creek to protect against steep erosion. Project is located on private property and supported in part by NRCS funding and tech assistance.

Describe Need for Project/Program (1 to 2 sentences):

Steelhead trout recovery for San Luis Obispo County has been identified as a priority by National Marine Fishery Service. This streambank stabilization project will prevent excessive erosion and sedimentation in creek and protect fish.

Project Website (if any):

http:__us-ltrcd.org_

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **9255 Santa Rosa Creek Rd, Cambria CA**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Agricultural**

Watershed (if known) See Map: **Santa Rosa Creek**

Project Cost Range: **<$250K**

Project Cost (if known): **$50,000**

Source of Cost Estimate: **Engineer**

Project Status: **Ready for Implementation**

Describe status of permitting: **Permits are in place**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Underway

Estimated ProjectStart Date: **9/1/2013**

Estimated ProjectEnd Date: **9/1/2014**

Identify proposed funding sources: **NRCS, Landowner and additionals**

What is the Percent Range of Matching Funds? **26%-50%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

No

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

No

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

No

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Prevent extreme sedimentation due to streambank stabilization as end result

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Ecosystem benefits include improved and expanded wildlife habitat, additional vegetation, improved steady flow

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

No

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Streambank and floodplain restoration

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

NRCS is already working with client and has engineered plans plus permits. Landowner has run out of money and requested RCD assistance.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Ag road location to this property is aligned with Santa Rosa Creek and its design dates back to early part of 20th century. Culvert and road alignment demonstrate negative impacts to creek environments. Steep drainage is causing 237 acres to flow at high velocity toward 72' culvert at 45 degree angle. Bank 7 has been undercut and eroded with large trees slipping into stream.

Other Comments:

N_A

Supplemental Water Supplies for Paso Robles Groundwater Basin

North County

Sponsoring Agency/Organization: **Various**

Contact Name: **Courtney Howard**

Affiliation: **County of San Luis Obispo**

Address: **County Government Center, Rm 207, San Luis Obispo, CA 93408**

Phone Number: **(805) 781-1016**

Email: **choward@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Consistent with the adopted Paso Robles Groundwater Basin Management Plan (March 2011) implementation strategies, this project would seek supplemental water supply sources to address the declining groundwater levels and to meet future water demand projections. This project would require feasibility studies, permitting, design, and implementation of some combination of the following supplemental water supply sources: Nacimiento Water, State Water, recycled water, and Salinas River, but may also consider exchanges, new off_on stream storage, basin creeks, desalination and precipitation enhancement. It may also require construction of distribution infrastructure in geographically specific areas.

Describe Need for Project/Program (1 to 2 sentences):

The Resource Capacity Study prepared by the San Luis Obispo County Planning Department in November 2010 states that the Basin is near or at perennial yield – placing the basin at the most severe_ critical planning designation – and monitoring wells in the Paso Robles Groundwater Basin near the City of Paso Robles show continuous declining elevations indicating insufficient groundwater recharge to sustain current annual average pumping. Parts of the basin have experienced declining groundwater levels in excess of 70 feet over a relatively short period of time: 1997-2009, and those levels continue to drop.

Project Website (if any):

http:__www.slocountywater.org_site_Water%20Resources_Water%20Forum_

Subregion (See Map) **North County**

If Regional, please indicate which Subregions: **N_A**

Nearest Cross Street or Street Address: **N_A**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Various**

Watershed (if known) See Map: **Various**

Project Cost Range: **>$5M**

Project Cost (if

known):

Source of Cost Estimate: **Agency**

Project Status: **Planning Phase**

Describe status of permitting: **None**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

None

Estimated ProjectStart Date: **1/1/2014**

Estimated ProjectEnd Date: **1/1/2024**

Identify proposed funding sources: **Assessments, fees, water rates**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **San Miguel**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes. The feasibility studies would determine the best alternatives for providing supplemental water supplies to offset the declining groundwater levels in the Paso Robles Groundwater Basin, which could then move into the design, permitting and implementation phases. This could include utilizing some portion of the 6,095 AFY of unsubscribed Nacimiento Water or 15,273 AFY of the District's State Water excess allocation or developing recycled water sources for basin use or management of Salinas River use.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes. Pending feasibility studies this may include treatment and development of recycled water to offset groundwater use or recharge the groundwater basin via recharge_ injection.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes. The supplemental water would diversify basin users' supply portfolio, improving drought preparedness especially for communities solely dependent on groundwater. For instance, when available a supplemental source could be used in lieu of groundwater, and vice versa, allowing flexibility in water supply management.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes. As groundwater levels decline, the basin becomes more susceptible to general water quality degradation, including issues related to the increased geothermal activity noted in a recent USGS study. Providing additional water supplies to offset groundwater use will help to reduce this water quality

degradation.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. Over the last decade, riparian habitat has been decreasing along basin creeks and river systems as the groundwater levels continue to decline. General stabilization of groundwater elevations will allow the creeks and rivers to maintain a live stream for longer periods of time, allowing the riparian habitat health to improve. Also, pending feasibility studies, supplemental sources may include reoperating the river systems and dams in order to manage and increase the duration of live stream in basin waterways.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. The objective of developing a supplemental water supply portfolio would be to improve Paso Robles Groundwater Basin management. New water sources are needed as demand is at or near the basin's 97,700 AFY perennial yield, providing the threat of basin overdraft. Without new water supplies the groundwater basin levels will continue to decline.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Yes. Pending feasibility studies, this may include management of storm flows to allow increased recharge to the basin and prolonged live streams in basin waterways.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. This program could help to instill a collaborative approach to water management between the rural, urban, and agricultural user sectors by developing new shared water supplies.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes. San Miguel, a State-defined disadvantaged community, overlies the Paso Robles Groundwater Basin and is solely dependent on it for the community's water supply.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes. Climate change models project increased high intensity storms and extended periods of lower rainfall and_or droughts. Pending feasibility studies, this water supply portfolio may include projects to manage surface water flows (e.g. bladder dams along waterways), providing a steady state of flow to local waterways, therefore increasing basin recharge and descreasing the negative effects of climate change by allowing the water to remain in the basin for later use.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Partnerships may be necessary depending on who benefits from the implementation of new water supply sources. Implementation of new supplies will likely involve various users of the Paso Robles Groundwater Basin, as well as a potential inter-regional effort with Monterey County, as a portion of the basin is within their jurisdictional boundaries.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If groundwater management activities are not implemented, priority groundwater basins will continue to see the current (if not worsening) water quality issues, declining levels, and other issues with overall basin management.

Other Comments:

This may evolve into mulltiple projects, after feasibility studies and intial planning efforts are completed. The project cost is left blank as too many detailed are unknown to accurately estimate the cost to implement a project or water supply portfolio projects. A refined cost estimate will be provided once the selected water supply portfolio is selected.

Templeton CSD East Side Force Main and Lift Station Project

North County

Sponsoring Agency/Organization: **Templeton CSD**

Contact Name: **Tina Mayer**

Affiliation: **Templeton CSD**

Address: **420 Crocker Street, PO Box 780, Templeton, CA 93465** Phone Number: **(805) 434-4900**

Email: **tlm@templetoncsd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Maybe**

Provide a Brief Project/Program Description (1 to 2 sentences):

Return increased volume of treated wastewater to percolate into the underflow of the Salinas River for subsequent retrieval by municipal wells downstream. This alternate use will provide new water to supplement existing supplies and allow for better water management practices in the Atascadero Basin.

Describe Need for Project/Program (1 to 2 sentences):

The project will create additional water supply availablility for municipal purposes and offset extractions from deep goundwater wells in the Atascadero Basin. By improving groundwater levels for beneficial uses the project will provide basin-wide environmental, health and safety benefits and improve the overall water supply to the Community of Templeton..

Project Website (if any):

The project will be on the TCSD website when it is under construction.

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **East Side Wastewater Collection area to Volpi Ysabel**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban**

Watershed (if known) See Map:

Project Cost Range: **>$5M**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Design Phase**

Describe status of permitting: **Permitting underway, est. March 2014**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

CEQA completed. MND complete May 23, 2012

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **Looking for construction only - Loan and _ or Grant Funding to supplement local TCSD funding sources.**

What is the Percent Range of Matching Funds? **26%-50%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

The Project provides for water conservation, groundwater storage and improved water use efficiency. An increased volume of treated wastewater will be available for beneficial use directly through recapture by downstream municipal wells. This water will be used to offset water from the deep groundwater aquifer in the Atascadero Basin. Use of this supplemental supply will protect the basin health.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

This project will improve the sustainablity of water supplies for the Community of Templeton and its neighbors in the Atascadero Basin.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

This project will improve water supply reliability by treating all wastewater generated within the District and discharging it within the District for retrieval by downstream municipal wells. The Eastside Wastewater area flows are currently treated by the Paso Robles WWTP and treated wastewater is surface discharged into the Salinas River where it is not retrievable.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

The project provides matching water quality for municipal uses through an extensive biological treatment and percolation process.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

The project provides for environmental benefits and public education benefits in providing an opportunity to demonstrate the reuse of treated wastewater for beneficial uses.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats

of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

This water supply project will be used to better manage water use from the deep groundwater aquifer in the Atascadero Basin. The project will assist in mitigating any future potential for overdraft of the Atascadero Basin by providing a reliable supplemental water supply that can be counted on even during drought periods.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

N_A

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

The project improves water resource management by maximizing the efficient use of all water resources under the local control of the TCSD.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

N_A

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

By maximizing the efficient use of all local water supplies the project addresses climate change concerns related to potential drier water supply conditions.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Maybe

If yes or maybe, please explain:

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the project is not implemented the TCSD may lose local control of a water supply that will benefit the Atascadero Basin. An opportunity to improve water efficiency will be lost along with the environmental and community benefits.

Other Comments:

Toad Creek flood control, restoration and basin re-charge

North County

Sponsoring Agency/Organization: **Upper Salinas-Las Tablas Resource Conservation District**

Contact Name: **Laura Edwards**

Affiliation: **US-LT RCD**

Address: **65 S. Main Street, Suite 107** Phone Number: **805-434-0396 x 5**

Email: **laura@us-ltrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Manage Toad Creek flooding in Templeton by constructing a shallow unfenced retention _detention basin in the flood hazard zone, restore the original creek alignment, restore habitat to encourage the return of steelhead trout, and re-charge the Atascadero sub-basin. Inflow to the basin is Toad Creek plus two unnamed tributaries. Outflow is under the Union Pacific Railroad trestle. After which, Toad Creek flows into the Salinas River.

Describe Need for Project/Program (1 to 2 sentences):

The SLOCFC&WC District contracted with North Coast Engineering to perform a Templeton Drainage and Flood Control Study draft dated February 2011_ an Addendum was later prepared in August 2012. The Templeton community preferred a modified version of Project 8 as described in the TAAG Toad Creek Watershed Report approved February 21, 2013. TCSD supplies drinking water from the Atascadero sub-basin.

Project Website (if any):

None

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **Main Street and Highway 101**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Commercial Retail**

Watershed (if known) See Map: **Salinas River**

Project Cost Range: **$500K-$1M**

Project Cost (if known):

Source of Cost Estimate: **Other**

Project Status: **Ready for Implementation**

Describe status of permitting: **No permits have been obtained**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

CEQA compliance has not been completed

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources:

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes, the Atascadero sub-basin is replenished by rainwater. A stormwater management basin located over the sub-basin will recharge the aquifer.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes. Capturing stormwater runoff for percolation into the aquifer has a sustainability benefit that would be realized by TCSD customers.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes. Capturing stormwater to re-charge the Atascadero sub-basin, rather than letting this water flow into the Salinas River, will benefit 7000 TCSD residents.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes. Under a state water agreement the TCSD is required to draw groundwater from the Atascadero sub-basin during the summer months. A basin will also facilitate local management of sediment.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. The basin lies primarily within the Toad Creek FHZ. The project includes riparian restoration as specified in Templeton Area Standards. Man altered the original watercourse. When returned to its earlier path the velocity of stormwater will be reduced. Restoration will encourage the return of steelhead trout.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats

of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Yes. The Atascadero sub-basin is replenished by rainwater. Capturing runoff for percolation to the basin will benefit the TCSD who by law is required to draw groundwater from the basin during the summer months.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Yes. The Templeton Drainage and Flood Control Study draft Addendum prepared by North Coast Engineering is the community preferred alternative. Hydrological analysis for Project 8 is completed. This report does not include stream _floodplain restoration.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. Stated above. Public outreach and education was part of the TAAG Toad Creek committee activity (April 2011 - February 2013). The committee drafted the Toad Creek Watershed Report that was approved by TAAG. Continued community involvement is key to the success of this project.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes. Retaining beneficial use of stormwater runoff by recharging an aquifer is a water conservation tool. For several years rainfall has been well below average. Water management and water quality everywhere in the county is a critical issue related to climate change.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The partnership agencies are US-LT RCD, SLOCFC&WC District, TCSD, and CA Fish & Wildlife. The community stakeholder is TAAG. Additional partners may be County Parks or TCSD Parks if dual use of the stormwater basin could be achieved.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

The Toad Creek watershed is approximately 8 square miles. The need for flood control management was identified along with alternative solutions. Project 8, a continuous shallow unfenced basin, is the preferred project by the Templeton community. This project needs to be incorporated into the SLOCFC&WC District capital improvement project list so that it can be prioritized for funding.

Other Comments:

In addition to stormwater basin alternatives the contracted study identified 5 sediment removal projects on private property and 4 road crossings _culvert deficiencies. The basin should be operational before other upstream sediment and road improvements are undertaken. If not executed in this order, downtown flooding would likely be significantly increased. Guide for Implementing Flood Control Projects 2009 states "All the communities within the unincorporated areas of San Luis Obispo County to some extent lack formal drainage systems." In Templeton according to the Guide, flooding has increased in the downtown areas dramatically due to increased development and runoff from the westside of town.

Toad Creek Waterway Management Program

Sponsoring Agency/Organization: **SLO County Flood Control and Water Conservation District**

Contact Name: **Jill Ogren, PE**

Affiliation: **San Luis Obispo County Public Works**

Address: **County Government Center, Room 206, San Luis Obispo, CA 93408**

Phone Number: **805.781.5263**

Email: **jogren@co.slo.ca.us**

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Provide a Brief Project/Program Description (1 to 2 sentences):

Develop a Waterway Management Program (WMP) for Toad Creek in the community of Templeton in order to reduce the frequency of flooding and prevent continued flood damage to adjacent public and private properties caused by deficient drainage facilities. The Toad Creek WMP will 1) prioritize flooding problems caused by deficient drainage facilities and inadequate creek channel capacity, 2) establish a framework for how Toad Creek, its tributaries, and other appurtenant public drainage facilities will be managed, long-term, to meet the flood control goals established by the District and the community. The WMP will be developed with a compehensive perspective and will include a combination of capital improvement projects and long-term maintenance activities, active restoration and enhancement projects, as well as mitigation measures in order to ensure that its approach to flood management will provide flood protection while simultaneously providing benefits to the environment.

Describe Need for Project/Program (1 to 2 sentences):

There are existing flooding problems in Templeton. A comprehensive drainage plan is necessary to identify community priorities and guide future planning efforts, especially since Templeton has a high potential for additional development to occur.

Project Website (if any):

Subregion (See Map)

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **Templeton, CA**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Agriculture, rural residential, residential, commercial**

Watershed (if known) See Map:

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Conceptual**

Describe status of permitting: **NA**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **funding sources are currently being pursued**

What is the Percent Range of Matching Funds? **<10%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Ecosystem restoration. The project could propose management practices to promote_enhance riparian vegetation, bank stabilization, and stream shading benefiting ecosystem restoration, water quality, flood protection and aesthetics.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

The proposed WMP will aim to develop a comprehensive set of actions to reduce flooding of Toad Creek and its tributaries in the community of Templeton, while also enhancing the environment. Actions are anticipated to include: increasing existing culverts, constructing_upsizing detention basins to collect and filter pollutants as well as reduce flow runoff volumes and velocities, managing in-channel vegetation to

enhance habitat and reduce flow restrictions, reducing sediment deposition within the channel, as well as implementing specific sediment removal projects.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Maybe

If yes or maybe, please explain:

Program would be developed with stakeholder input including Templeton CSD and the Templeton Area Advisory Group (TAAG).

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Frequent and shallow flooding occurs at several locations in the community of Templeton along Toad Creek A comprehensive drainage plan will assist the District in implementing viable solutions for improving flood protection for the community as well as guide future planning efforts. Without a comprehensive plan, the District will not be effective at seeking funding to implement improvements and will not have the information resources to address future needs as development of the community increases_occurrs.

Other Comments:

Preliminary phases of a Templeton Drainage Study have been completed which involved the review of existing drainage infrastructure, identification of deficient drainage facilities, determination of hydrology fo the study area, hydraulic analyses of major drainage facilities, identification of causes of deficiencies, and identification of potential solutions for deficient drainage.

Upper Salinas watershed plans

North County

Sponsoring Agency/Organization: **US-LT RCD**

Contact Name: **Laura Edwards**

Affiliation: **US-LT RCD**

Address: **65 S. Main Street Suite 107, Templeton, CA 93465** Phone Number: **805-434-0396 x 5**

Email: **laura@us-ltrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

Develop watershed management plans for watersheds in the Upper Salinas region where water supplies are stressed and steelhead habitat is declining to determine implementation strategies for increasing watershed health, reversing climate change impacts, and increasing groundwater basin recharge for the Paso Robles groundwater basin and other localized sub-basins.

Describe Need for Project/Program (1 to 2 sentences):

The upper Salinas watersheds are the headwaters for the Salinas River. Developing focused strategies for restoring watershed health will improve water quantity and quality and increase groundwater recharge into the Paso Robles groundwater basin which is currently in overdraft and under a level III severity rating.

Project Website (if any):

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address:

Land Use (e.g., urban, ag, rural residential etc.) See Map:

Watershed (if known) See Map: **Big Creek, San Simeon, Cambria, Cayucos**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Ready for Implementation**

Describe status of permitting: **n_a**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

n_a

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources:

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

The proposed watershed management plan will provide concrete targeted recommendations to increase groundwater recharge, provide stormwater management strategies, provide locations for efficient and effective infiltration, and address water use efficiency for area land uses.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

The proposed watershed management plan will provide recommendations specific to the region related to access to water rights and existing water supplies, water supply management, water quality, and sustainability of Ag, rural, and urban water supplies.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

No

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

The Watershed plan will identify implementation strategies for improving water quality including improving groundwater conditions and providing recommendations to reduce pollutant loads, including those flowing into the Salinas River, which eventually outfalls into the Monterey Bay National Marine Sanctuary via Monterey County.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

The project will expand environmental stewardship and provide recommendations to ensuring that each watershed ecosystem is restored. The plan would identify key infiltration zones for targeted protection strategies and provide direction for land use management of existing Agricultural, rural, and urban land uses. In addition, the plan would provide details for in stream flow management, invasive species reduction and increasing habitat conditions for steelhead trout survival and migration.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

The project will provide a more detailed analysis of the existing groundwater basins and provide basin and water supply management strategies.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

The proposed plan will provide specific targeted areas for LID implementation, watershed and flood management, and stream restoration.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

The watershed plan will have a public outreach and education component in addition to providing recommendations for collaborative programs between agricultural and urban landowners.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No disadvantaged communities are located within the scope of the project boundaries however, the Salinas river flows to San Miguel, and addressing water quantity and quality issues upstream will have [positive affects downstream.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

The proposed plan will address impacts related to climate change throughout the watersheds of the North County and provide recommendations for reversing climate change impacts, including strategies for decreasing water temperature, increasing riparian vegetation, and increasing carbon sequestering.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Lack of knowledge about local watersheds results in management efforts that do not fully maximize conservation ad restoration efforts. Understanding how watersheds and water flows effect recharge of the Paso Robles groundwater basin will allow decision makers to make informed decisions about options for enhancing groundwater recharge and enhancement options as part of a holistic management strategy.

Other Comments:

Urban Landscape Water Management and Conservation Program

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **Coastal San Luis Resource Conservation District**

Contact Name: **G.W. Bates**

Affiliation: **Coastal San Luis Resource Conservation District**

Address: **645 Main Street, Suite F, Morro Bay, CA 93442** Phone Number: **805-772-4391**

Email: **gbates@coastalRCD.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

This project is designed to provide education, training, technical support, and capital funding to improve landscape irrigation water management in the County. Funds will be used to evaluate city and county parks, school district fields and large commercial landscapes for water use efficiency. The funds will also be used to provide equipment upgrades and train managers on proper irrigation scheduling. The project will include the following components:

1. Turf and landscape water audits.

2. Equipment upgrades to control systems to incorporate moisture sensors and improved scheduling.

3. Sprinkler upgrades to improve Distribution Uniformity.

4. Conversion of turf areas to lower water use plants.

5. Training for agency staff on proper maintenance and irrigation scheduling to improve water use efficiency.

Describe Need for Project/Program (1 to 2 sentences):

Urban parks consume larger amounts of water and traditionally have poor water use efficiencies. Agency staff often lack the proper training to mange these systems effectively. This results in over irrigation due to poor timing and a lack of understanding about system performance. Significant water savings can be achieved through proper operation, improved equipment and turf reduction.

Project Website (if any):

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address:

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Urban**

Watershed (if known) See Map: **County Wide**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Ready for Implementation**

Describe status of permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

NA

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **In kind match from cities and districts.**

What is the Percent Range of Matching Funds? **<10%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes. The proposed project will improve agricultural water use efficiency by helping to provide modern tools and methods for landscape irrigation water management.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes. The proposed project will help agencies save water and move towards sustainability.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Yes. This project will improve operational efficiencies for landscape irrigation systems by helping to provide structural improvements to existing systems. By increasing irrigation water use efficiency the project will also improve drought preparedness.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Yes. This project will reduce non-point source contaminants to surface and ground water by reducing excess leaching and runoff.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Yes. The goal of this project is to improve water use efficiencies by increasing the percentage of applied irrigation water that contributes to beneficial use. This will reduce the amount of 'excess' or 'non-beneficial' irrigation water pumped which will reduce the opportunity for pollution, and reduce the amount of polluted runoff entering local ecosystems.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

No.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

No.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes. A major component of this project is education, outreach and training for landscape water management.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes. This project will improve irrigation water management throughout the County. This includes any disadvantaged communities where irrigated landscape is present.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

Yes. Improved irrigation efficiencies will reduce energy used for pumping. This in turn will reduce greenhouse gas emissions.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

This project will involve partnerships throughout the County. The Coastal San Luis Resource Conservation district will partner with the Upper Salinas - Las Tablas Resource Conservation District and any cities, community services districts and school districts wishing to improve water use efficiency.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Failure to implement landscape water management and conservation efforts will result in continued inefficient water use in outdoor areas throughout the County.

Other Comments:

Vertical Well Project for HRCSD

North County

Sponsoring Agency/Organization: **Heritage Ranch Community Services District**

Contact Name: **John D'Ornellas**

Affiliation: **Heritage Ranch Community Services District**

Address: **4870 Heritage Road, Paso Robles, CA 93446** Phone Number: **805-227-6230**

Email: **john@heritageranchcsd.com**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **No**

Provide a Brief Project/Program Description (1 to 2 sentences):

HRCSD's sole water supply is from their three Gallery Wells located in Nacimiento River, which draw water from the surface stream through the natural soil and engineered media. The proposed project will install two vertical wells near the Nacimiento River, just outside of the primary streambed near the existing Gallery Wells and Water Treatment Plant, to provide additional water supply from the underflow of the Nacimiento River and Lake.

Describe Need for Project/Program (1 to 2 sentences):

The Gallery Wells, as noted previously are the District's only water supply source for 1,800 connections, including 3,500 residents, a public school, and a small commercial center, and are highly susceptible to drought conditions (low flow releases or no flow releases over the Nacimiento Dam) and high flood conditions (high flow releases over the dam under high rain events >3,000 cfs). The Vertical Well Project will provide the District with an alternate water supply source that is not solely dependent on the flow releases from the Dam and has higher protection from flood conditions, thus providing more redundancy and reliability to the District's water supply source.

Project Website (if any):

N_A

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **See Project Street Address Above**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **Residential Rural**

Watershed (if known) See Map: **Nacimiento (10)**

Project Cost Range: **$250K-$500K**

Project Cost (if known):

Source of Cost Estimate: **Engineer**

Project Status: **Planning Phase**

Describe status of permitting: **The District has not obtained any permits. The Project would require permits from the County and the Department of Public Health**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

The District will undertake the environmental review and preparation of the Negative Declaration or Exemption. Date TBD

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **District has already funded through their water fund the preliminary engineering to identify feasibility and suitable well locations**

What is the Percent Range of Matching Funds? **<10%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

The Project will allow access to existing water allocation of the Nacimiento Water during periods of low flow (below dead pool when flow can no longer be released over the dam) and assist the District in maintaining a water supply if their Gallery Wells are washed out due to high flood releases over the dam, which occurred in the recent past.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

The project will provide the District with a redundant and more reliable water supply by allowing the District to access their water allocation from multiple sources in lieu of their current single source, the Gallery Wells, thus providing more security to the 1,800 water connections currently being served by the District.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Under low flow conditions (<20 cfs releases over the dam), the District's Gallery Wells continuously pause due to lack of availability of water flowing over the wells. The vertical wells would allow the operators to access the abundant underflow of the river to obtain the water needed to meet daily demands. The vertical wells provide a higher reliability to the District's water supply by providing an alternate water supply during drought and_or flood conditions.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

The Gallery Wells are susceptible to high raw water turbidity levels of Lake Nacimiento. Under certain conditions water turbidity is significant and can exceed over 100 NTU. The Surface Water Treatment Rules for the District's WTP requires the effluent water turbidity levels to be less than or equal to 0.3 NTU in 95% of the measurements per month. High raw water turbidity is extremely difficult for the District to treat,

requiring the District to continuously back flush their filters at the WTP and the Gallery Wells, which ultimately wastes water and reduces the production water available. The installation of the vertical wells would provide the District with an alternate water supply that would have a lower raw water turbidity due to the natural filtering that occurs with the underflow water. Therefore, under raw water high turbidity times in the Nacimiento River, the District can utilize the Vertical Wells to provide their water supply.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

Current maintenance of the Gallery Wells requires construction work within the Nacimiento River including dewatering of the work zone if repairs are needed to maintain the current facilities to maintain adequate water production. This project will reduce or eliminate the need to work within the Nacimiento River by allowing a blending of both Gallery Well and Vertical Well water.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

No

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

This project will not improve flood management. However, this project will make the District less susceptible to the flooding if and_or when Monterey County Water Resources Agency determines to release high flows over the dam.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

No

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

No

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

No

If yes or maybe, please explain:

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If this project is not implemented, the District is susceptible to no water supply under either drought conditions or under flooding conditions.

Other Comments:

The District has evaluated numerous alternative options to provide a more reliable water supply to the 1,800 customers at Heritage Ranch. Groundwater wells, outside of the Nacimiento River do not provide enough water to supply the customer's needs.

Water Conservation Corps

Regional (2 or 3 Sub-Regions)

Sponsoring Agency/Organization: **California Conservation Corps (CCC) - San Luis Obispo Center _ (Other Partners TBD)**

Contact Name: **Jody Weseman**

Affiliation: **Program Manager - CCC Watershed Stewards Project**

Address: **1527 Madera Ave, San Luis Obispo, CA** Phone Number: **805-542-8461**

Email: **Jody.Weseman@ccc.ca.gov**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The Water Conservation Corps (WCC) would provide skilled laborers, community outreach, and education to SLO County stakeholders. Participants in the program would be trained in the concepts and instillation techniques of greywater plumbing, rainwater gardening, water catchment systems and stormwater mitigation. The WCC crews would implement needed water conservation projects and participate in community outreach_education events.

Describe Need for Project/Program (1 to 2 sentences):

The WCC would provide SLO County Departments, State Parks, and community organizations the means to reduce their water consumption and carbon footprint. Community outreach about droubt resistant landscaping, water conservation techniques, and watershed protection will improve the communities' understanding of SLO County's water insecurities.

Project Website (if any):

ccc.ca.gov_go_wsp (This is the website to a similar project of the California Conservation Corps.)

Subregion (See Map) **Regional (2 or 3 Sub-Regions)**

If Regional, please indicate which Subregions: **NA**

Nearest Cross Street or Street Address: **NA**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **All land use that will benefit the public (urban, rural residential, commercial, ag, low-income residential, homeless shelters, etc…)**

Watershed (if known) See Map: **All watersheds within SLO County**

Project Cost Range: **$1M-$5M**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Conceptual**

Describe status of permitting:

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Estimated ProjectStart Date: **9/1/2014**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources: **Reimbursement for projects installed, CCC Scholarships for WCC members, CCC as Fiscal Agent**

What is the Percent Range of Matching Funds? **26%-50%**

Does Project Serve a Disadvantaged Community (DAC)? **Oceano**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

WCC would work with community partners to increase water conservation and mitigate stormwater by installing rain gardens, greywater systems, and water catchment systems..

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Educating the public about stormwater responsibilities, native endangered and threatened watershed species, and simple conservation techniques will aid in the County's mission to improve water quality and supply management. Green infrastructure and low impact development techniques are cost-effective, sustainable, and environmentally friendly approaches that help manage water and water pollutants at the source, preventing or reducing the impact of infrastructure and development on water and water quality.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

The WCC program would address water supply reliability by specializing in water catchment system installation_ grey water education and instillation_ rain garden education and instillation_ and implementing 'green street' initiatives.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Implementation of effective stormwater management measures result in the following benefits: -Increasing uplands water infiltration and retention capacity improve water security by recharging groundwater aquifers, while increasing base flows in streams and reducing mortality in endangered fish populations.-Slowing down stormwater runoff will decrease topsoil loss, erosion, flooding and stream flow variance by reducing the volume and rate of peak flow events.-Removing pollutants in runoff will improve water quality in streams and aquifers.-Reducing the delivery

of erosion products to streams will increase flows by keeping pools and riffles free of excessive sedimentation.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

The WCC will expand watershed stewardship within the CCC and SLO community by creating community outreach events where local volunteers and WCC members will implement watershed restoration projects. Activities will include but are not limited to: fish passage barrier removal, creek clean-ups, invasive removal, native plantings, etc...

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

WCC will incorporate SLO County Water Protection Plan information in all outreach literature. Members will be versed in the current state of the groundwater basin and threats of overdraft. Members will engage in needed water quality and quantity testing to verify effectiveness of projects.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Rain gardens and 'green streets' work to improve flood management as they 'plant water' by providing a permeable service to collect storm runoff and filter stormwater pollutants.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

WCC members would perform community outreach by hosting information booths at local fairs (Coastal Discovery Fair, Lopez Lake Outdoor Discovery Festival, Farmers Markets) and by teaching stewardship in Title One schools, local homeless shelters, and within the CCC community. WCC members would help to educate the public about the importance of groundwater recharge and preservation, the true cost of pumping water and how it ties to Climate Change, and the importance of biodiversity in our watersheds.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

WCC would provide educational materials in Spanish and focus outreach efforts to low-income families, homeless shelters, and Title One Schools.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

The carbon footprint currently associated with moving, treating and heating water in the U.S. is at least 290 million metric tons a year. The CO2 embedded in the nation's water represents 5% of all U.S. carbon emissions and is equivalent to the emissions of over 62 coal fired power plants (River Network Report). WCC would provide SLO County the means to address Climate Change with cost effective green infrastructure.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

The WCC would partner with the SLO California Conservation Corps so WCC members would be provided health care, housing, and an opportunity to earn a $5,500 scholarship.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

If the WCC is not funded by IRWM the program will not exist.

Other Comments:

The California Conservation Corp's support for the WCC program is contingent on the identification of additional partners to act as the fiscal agent (bid projects, purchase materials, provide heavy equiptment,etc…).

Water Conservation Partnerships in Chorro Valley

North Coast

Sponsoring Agency/Organization: **Morro Bay National Estuary Program**

Contact Name: **Adrienne Harris**

Affiliation: **Morro Bay National Estuary Program**

Address: **601 Embarcadero, Suite 11_ Morro Bay, CA 93442** Phone Number: **(805)772-3834**

Email: **aharris@mbnep.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Yes**

Provide a Brief Project/Program Description (1 to 2 sentences):

The Water Conservation Partnership in Chorro Valley will help protect creek and groundwater resources in the Chorro Valley. The Estuary Program and its partners will work with landowners on rainwater harvesting, winter water storage, water rights alterations, and other conservation practices to protect stream flow during the dry months of the year.

Describe Need for Project/Program (1 to 2 sentences):

The Chorro Creek Watershed is important steelhead trout habitat. Low flow in the summer is one of the most important limiting factors to the species recovery in the area. In addition, creek flow and groundwater availability are connected in this drainage_ each greatly impacting the other.

Project Website (if any):

n_a

Subregion (See Map) **North Coast**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address: **along highway 1 between SLO and Morro Bay**

Land Use (e.g., urban, ag, rural residential etc.) See Map: **agriculture**

Watershed (if known) See Map: **Morro Bay**

Project Cost Range: **$1M-$5M**

Project Cost (if known):

Source of Cost Estimate: **Agency**

Project Status: **Planning Phase**

Describe status of permitting: **unsecured**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

Estimated ProjectStart Date: **1/1/2015**

Estimated ProjectEnd Date: **1/1/2017**

Identify proposed funding sources: **NOAA, MBNEP, Trout Unlimited,California Department of Fish and Wildlife**

What is the Percent Range of Matching Funds? **11%-25%**

Does Project Serve a Disadvantaged Community (DAC)? **None**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

This project will aid in reservoir storage, water use efficieny, and stormwater management. Capturing water in the winter when water is plentiful to be used when water is scarce helps elliviate problems during times of scarcity. In addition, capturing some winter flow helps with stormwater mangement, improving water quality and reducing the risk of flooding.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

During the project, one option landowners might choose is to alter exisiting water rights, helping alliviate conflicts during times of scarcity. In addition, capturing some winter flow helps with stormwater mangement, improving water quality and reducing the risk of flooding.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

Storing water when it is plentiful to use when it is scarce helps improve reliability. Systems can be built to provide a certain amount of water depending on the level of rain.

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

Currently the Morro Bay watershed is a 303d listed watershed impaired by sediment, nutrients, and bacteria. This project will help manage stormwater from some facilities, aiding in water quality protection.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species restoration, invasive species reductio

The federally listed Southern steelhead (Oncorhynchus mykiss irideus) uses the Chorro Watershed to spawn and rear. Currently creek flow is one of the most important limiting factor to its recovery.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Storing water during the winter helps protect shallow groundwater resources during the summer.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Managing stormwater runoff helps reduce the threat of flooding.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

Yes, this program helps landowners learn about water management at the watershed-scale.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Morro Bay is not listed as a disadvantaged community.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

With a changing climate, periods of drought and severe storm events may become more prevalent. Capturing winter water will help with water reliability during dry months and help with flooding during severe storm events.

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Yes

If yes or maybe, please explain:

Trout Unlimited, CEMAR, MBNEP, California Conservation Corps., NOAA, CA Department of Fish and Wildllife

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Currently, Chorro Valley is fully appropriated. As evidence by this dry summer, water will become increasingly scarce in Chorro Valley, creeks will dry up, leaving steelhead trout stranded and vunerable.

Other Comments:

N_A

Water-wise program (with target applied irrigation rates)

North County

Sponsoring Agency/Organization: **US-LT RCD**

Contact Name: **Laura Edwards**

Affiliation: **US-LT RCD**

Address: **65 S. Main Street Suite 107, Templeton, CA 93465** Phone Number: **805-434-0396 x 5**

Email: **laura@us-ltrcd.org**

Will this project involve partnerships with other agencies or a neighboring IRWM region? **Maybe**

Provide a Brief Project/Program Description (1 to 2 sentences):

Water audit program provided in concert with the US-LT RCD to assist landowners in achieving water efficiency. The proposal also includes determining target applied irrigation rates based on microclimate conditions for all crops grown in the County to determine whether or not ag users are as efficient with their water use as possible. The program would provide technical assistance from various local experts to help farmers and ranchers achieve maximum efficiency in their irrigated water use.

Describe Need for Project/Program (1 to 2 sentences):

The Paso Groundwater basin is in overdraft and has been listed as a level III severity rating. Agricultural uses must focus their water conservation efforts to ensure that maximum water savings are achieved while providing adequate irrigation for crops and rangeland to provide business sustainability. Developing target applied irrigation rates fro all crops in the County based on specific localized microclimates will provide a baseline goal for agricultural and owners ensuring the balance between water conservation needs and economic vitality.

Project Website (if any):

Subregion (See Map) **North County**

If Regional, please indicate which Subregions:

Nearest Cross Street or Street Address:

Land Use (e.g., urban, ag, rural residential etc.) See Map:

Watershed (if known) See Map: **Paso Groundwater basin focused wit possibility to expand program count-wide in the future**

Project Cost Range: **<$250K**

Project Cost (if known):

Source of Cost Estimate:

Project Status: **Ready for**

Implementation

Describe status of permitting: **n_a**

Describe status of permitting and CEQA/NEPA compliance (include est. date of completion):

n_a

Estimated ProjectStart Date: **1/1/1900**

Estimated ProjectEnd Date: **1/1/1900**

Identify proposed funding sources:

What is the Percent Range of Matching Funds?

Does Project Serve a Disadvantaged Community (DAC)? **San Miguel**

Does the Project/Program increase water conservation or bring new water supplies for beneficial use (e.g., groundwater storage, water recycling, reservoir storage, desalinization, water use efficiency, stormwater management, etc.)?

Yes - technical assistance will include property specific soil testing, site analysis, irrigation system analysis, etc and provide specific recommendations focused on water conservation and groundwater recharge efforts.

Does the Project/Program include improvements to existing water supplies (e.g., maximize accessibility to existing water rights, improve existing water quality, water supply management, sustainability of supplies for ag, rural and urban uses)?

Yes - the proposed project includes targeted recommendations and implementation assistance for water conservation methods and increased groundwater recharge improvements which will maximize accessibility to existing water rights, improvements to water quality and quantity, water supply management, and supply sustainability. Determining target applied irrigation rates will inform agriculturists of what water use is required to maintain crops while conserving maximum amounts for future use and groundwater recharge.

Does the Project/Program improve water system operational efficiencies or water supply reliability (e.g., conveyance facility sizing, system reoperation, drought preparedness, water transfers, etc.)?

No

Does the Project/Program improve water quality, matching water quality to the type of water use (e.g., improving groundwater conditions to improve water quality for agricultural water supplies, reduce or prevent point or non-point source contaminants to

The proposal will improve groundwater conditions by assisting landowners maintain groundwater basing resources and increasing recharge capabilities. Recommendations will also focus on implementation of LID installations to reduce run-off, retention of on-site flows for irrigation use and groundwater recharge, and natural filtration methods.

Does the Project/Program include environmental benefits (e.g., expand environmental and resource stewardship, ecosystem restoration, public education, recharge area protection, land use management, endangered species

restoration, invasive species reductio

Yes - expansion of environmental stewardship, public education and outreach through the development of target applied irrigation rates and technical assistance, recharge area protection, and land-use management.

Does the Project/Program improve groundwater management (e.g., understanding of groundwater basin and threats of overdraft, local management, implementation of basin management objectives, water elevation monitoring, banking/recharge, etc.)?

Developing target applied irrigation rates for all crops grown in North County will increase our understanding of Agricultural water use within the area where a severe water shortage exists. Technical assistance will support local management of water resources and implementation of basin management objectives.

Does the Project/Program improve flood management (e.g., low impact development, watershed management, flood control projects, system operations, stream/floodplain restoration, etc.)?

Technical assistance will focus o LID projects as applicable for specific agricultural users and support holistic watershed management.

Does the Project/Program improve water resources management and outreach (e.g. public outreach and education, collaboration among urban, ag, rural and environmental interests, alignment of water resources program, local control, etc.)?

The proposed water-wise program will provide educational opportunities and provide landowners with practical implementation strategies for decreasing water use and increasing irrigation efficiency. The water-wise program will also include assistance for landowners to implement recommendations to ensure that conservation is achieved.

Does the Project/Program address water-related needs of a disadvantaged community and/or tribal lands(e.g., watershed management, education, critical water quality or quantity, flood control, contamination, or wastewater treatment)?

Yes - San Miguel is located within the Paso Robles groundwater basin area and will be served by this program.

Does the Project/Program address climate change concerns (e.g., provide an energy efficient approach or reduce greenhouse gas emissions)?

No

Will this project involve partnerships with other agencies or a neighboring IRWM region?

Maybe

If yes or maybe, please explain:

The RCD may partner with the Vineyard team to provide technical assistance and develop target applied irrigation rates.

Describe what impacts, if any, will occur if the Project/Program is not implemented:

Water conservation efforts by agricultural landowners cannot be maximized without an understanding of how much water needs to be applied by crop and by microclimate to maintain viability without water waste. In addition, may farmers and ranchers require technical assistance and implementation assistance to fully understand all options related to water conservation and financial assistance to implement those recommendations.

Other Comments:

G-4 Ranked Project List

Summary Scoring

Project Information								Project Attributes					Project Objectives							Project Category Ranking						
Projects	Sponsor	Sub-Region	Project or Concept?	Project Category	Project Cost	Project Start Date	Related to IRWM and Goals (Pass/Fail)	Is there Multi-Agency support or sponsorship?	Is the Concept Regional or Inter-Regional (i.e., includes adjacent IRWM Areas)?	Does the Concept support a DAC?	Total Project Attributes	Total Goals	Water Supply	Ecosystem	Groundwater	Flood Management	Water Management	Total Objectives	Phase 1b: Total Score	Timeliness	Technical Feasibility	Environ-mental Compliance	Permitting	Funding	Prioritization Category	Total Point Score
SLO County Drought Protection & Climate Change Preparedness Pilot Project	GREENSPACE - The Cambria Land Trust	Multi-Regional	Project	Project Category	$250K-$500K	6_1_2014	Pass	5	5	5	15	25	20.00	20.00	16.67	14.29	20.00	90.95	130.95	0	0	0	0	0	Not Ready	130.95
Nature Center & Conservation Hub	Upper Salinas Las Tablas Resource Conservation District	Multi-Regional	Concept	Project Category	$1M-$5M	3_1_2015	Pass	5	5	5	15	25	14.00	20.00	16.67	11.43	20.00	82.10	122.10	0	0	0	0	0	Not Ready	122.10
Water Conservation Corps	California Conservation Corps (CCC) - San Luis Obispo Center _ (Other Partners TBD)	Multi-Regional	Concept	Project Category	$1M-$5M	9_1_2014	Pass	5	5	5	15	25	12.00	11.43	10.00	20.00	15.00	68.43	108.43	0	0	0	0	0	Not Ready	108.43
Agricultural Water Management and Use Efficiency	Coastal San Luis Resource Conservation District	Multi-Regional	Project	Project Category	$500K-$1M	Ready to proceed as	Pass	5	5	5	15	25	14.00	11.43	13.33	11.43	17.50	67.69	107.69	0	0	0	0	0	Not Ready	107.69
Morro Bay Cayucos Sanitation District Salt and Nutrient Management Plan	City of Morro Bay	Multi-Regional	Project	Project Category	<$250K	1_15_2014	Pass	5	5	0	10	20	20.00	20.00	20.00	-	15.00	75.00	105.00	0	0	0	0	0	Not Ready	105.00
LID Pilot Program	Upper Salinas Las Tablas Resource Conservation District	Multi-Regional	Project	Project Category	<$250K	6_1_2014	Pass	5	5	5	15	25	16.00	8.57	3.33	17.14	17.50	62.55	102.55	0	0	0	0	0	Not Ready	102.55
Off Stream Storage within the North County	Paso Robles Agricultural Alliance for Groundwater	Multi-Regional	Concept	Project Category	>$5M	n_a	Pass	5	5	5	15	25	10.00	2.86	20.00	8.57	20.00	61.43	101.43	0	0	0	0	0	Not Ready	101.43
Raising Santa Margarita Dam	Paso Robles Agricultural Alliance for Groundwater	Multi-Regional	Concept	Project Category	>$5M	n_a	Pass	5	5	5	15	25	10.00	2.86	13.33	14.29	20.00	60.48	100.48	0	0	0	0	0	Not Ready	100.48
Stormwater Rewards (LID) Rebate Program	Coastal San Luis Resource Conservation District	Multi-Regional	Project	Project Category	$250K-$500K	Ready to proceed as soon as	Pass	5	5	5	15	25	16.00	11.43	6.67	11.43	12.50	58.02	98.02	0	0	0	0	0	Not Ready	98.02
Evaluating land-surface subsidence and potential groundwater-storage losses as part of assessing proposed water banking sites in Paso Robles Groundwater Basin		Multi-Regional	Project	Project Category	<$250K	1_1_2015	Pass	5	5	5	15	25	8.00	8.57	10.00	11.43	12.50	50.50	90.50	0	0	0	0	0	Not Ready	90.50
Conservation Projects for Coastal Watersheds: Phase 1 Planning and Design	Coastal San Luis Resource Conservation District	Multi-Regional	Project	Project Category	$250K-$500K	7_1_2014	Pass	5	5	5	15	25	10.00	11.43	6.67	14.29	7.50	49.88	89.88	0	0	0	0	0	Not Ready	89.88
Countywide Watershed Planning Phase II	Coastal San Luis Resource Conservation District	Multi-Regional	Project	Project Category	<$250K	6_1_2014	Pass	5	5	0	10	25	6.00	17.14	13.33	5.71	7.50	49.69	84.69	0	0	0	0	0	Not Ready	84.69
County-wide Watershed and Creek Signage	US-LT RCD	Multi-Regional	Project	Project Category	<$250K	12:00:00 AM	Pass	5	5	5	15	25	10.00	8.57	10.00	2.86	12.50	43.93	83.93	0	0	0	0	0	Not Ready	83.93
Phase 2 - Lake Nacimiento Potable Water Treatment Plant	City of Paso Robles	Multi-Regional	Project	Project Category	>$5M	1_1_2020	Pass	5	5	0	10	20	18.00	2.86	13.33	-	12.50	46.69	76.69	0	0	0	0	0	Not Ready	76.69
Regional Implementation of Groundwater Management Activities	Various (depends on basin)	Multi-Regional	Concept	Project Category	0	Varies by basin	Pass	5	5	0	10	20	6.00	2.86	10.00	-	10.00	28.86	58.86	0	0	0	0	0	Not Ready	58.86
Rancher 2 Rancher Program	Coastal San Luis Resource Conservation District	Multi-Regional	Project	Project Category	<$250K	When funds are available	Pass	5	5	0	10	15	12.00	14.29	-	-	5.00	31.29	56.29	0	0	0	0	0	Not Ready	56.29
Urban Landscape Water Use Efficiency and Conservation Program	Coastal San Luis Resource Conservation District	Multi-Regional	Project	Project Category	<$250K	Ready to proceed as	Pass	5	5	5	15	20	2.00	2.86	3.33	-	5.00	13.19	48.19	0	0	0	0	0	Not Ready	48.19
North Coast Watershed Plans	US-LT RCD	North Coast	Project	Project Category	<$250K	12:00:00 AM	Pass	5	0	5	10	25	16.00	14.29	13.33	20.00	17.50	81.12	116.12	0	0	0	0	0	Not Ready	116.12
Rehabilitation Installation of Retention Ponds in North Coast (store & release)	Upper Salinas Las Tablas Resource Conservation District	North Coast	Concept	Project Category	<$250K	12:00:00 AM	Pass	5	0	5	10	25	14.00	17.14	10.00	17.14	15.00	73.29	108.29	0	0	0	0	0	Not Ready	108.29
Conservation Planning for North Coast Landowners	Upper Salinas-Las Tablas Resource Conservation District	North Coast	Project	Project Category	<$250K	TBD	Pass	5	0	5	10	25	10.00	14.29	3.33	20.00	12.50	60.12	95.12	0	0	0	0	0	Not Ready	95.12
Los Padres CCC Center - Stormwater LID Treatment Project	Morro Bay National Estuary Program	North Coast	Project	Project Category	$500K-$1M	6_1_2014	Pass	5	0	0	5	25	12.00	11.43	3.33	17.14	17.50	61.40	91.40	0	0	0	0	0	Not Ready	91.40
Chorro Creek Ecological Reserve Floodplain Restoration Project	Morro Bay National Estuary Program	North Coast	Project	Project Category	>$5M	1_1_2015	Pass	5	0	0	5	25	8.00	17.14	6.67	11.43	7.50	50.74	80.74	0	0	0	0	0	Not Ready	80.74
8th Street Upper Aquifer Well and Nitrate Removal Facility	Los Osos Community Services District	North Coast	Project	Project Category	$500K-$1M	Spring 2014	Pass	5	0	0	5	20	12.00	8.57	20.00	-	12.50	53.07	78.07	0	0	0	0	0	Not Ready	78.07
Water Conservation Partnerships in Chorro Valley	Morro Bay National Estuary Program	North Coast	Project	Project Category	$1M-$5M	1_1_2015	Pass	5	0	0	5	25	14.00	11.43	3.33	5.71	10.00	44.48	74.48	0	0	0	0	0	Not Ready	74.48
County Service Area 16 - New Storage Tank	San Luis Obispo County Flood Control & Water Conservation District	North Coast	Concept	Project Category	$1M-$5M	7_1_2015	Pass	0	0	0	0	15	10.00	-	6.67	-	7.50	24.17	39.17	0	0	0	0	0	Not Ready	39.17
CSA 16 - Waterline - Upsize 1st Street	San Luis Obispo County Flood Control & Water Conservation District	North Coast	Concept	Project Category	$500K-$1M	7_1_2013	Pass	0	0	0	0	10	8.00	-	-	-	7.50	15.50	25.50	0	0	0	0	0	Not Ready	25.50
CSA 16 - Waterline Loop N. 2nd to N. 3rd Streets	San Luis Obispo County Flood Control & Water Conservation	North Coast	Concept	Project Category	<$250K	7_1_2017	Pass	0	0	0	0	10	8.00	-	-	-	7.50	15.50	25.50	0	0	0	0	0	Not Ready	25.50
County Service Area 10A - New 200k Gallon Storage Tank	San Luis Obispo County Flood Control & Water Conservation	North Coast	Concept	Project Category	$1M-$5M	7_4_1905	Pass	0	0	0	0	10	8.00	-	-	-	5.00	13.00	23.00	0	0	0	0	0	Not Ready	23.00
Los Osos Landfill Remediation - Pump and Treat	County of San Luis Obispo	North Coast	Project	Project Category	$500K-$1M	2013-2014	Fail	5	0	5	10	5	-	-	3.33	-	-	3.33	18.33	0	0	0	0	0	Not Ready	18.33
Templeton CSD East Side Force Main and Lift Station Project	Templeton CSD	North County	Project	Project Category	>$5M	March 2014 or later depending on funding	Pass	0	0	0	0	25	20.00	17.14	20.00	17.14	17.50	91.79	116.79	0	0	0	0	0	Not Ready	116.79
Paso Robles Groundwater Basin Restoration and Basin Recharge	Upper Salinas-Las Tablas Resource Conservation District	North County	Concept	Project Category	$500K-$1M	Undetermined	Pass	5	0	5	10	25	14.00	14.29	13.33	20.00	12.50	74.12	109.12	0	0	0	0	0	Not Ready	109.12

North County Fertilizer Regions Precision Agriculture	Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)	North County	Project	Project Category	<$250K	1_1_2014	Pass	0	0	5	5	25	12.00	20.00	16.67	17.14	10.00	75.81	105.81	0	0	0	0	0	Not Ready	105.81
Upper Salinas watershed plans	US-LT RCD	North County	Project	Project Category	<$250K	12:00:00 AM	Pass	0	0	0	0	25	16.00	14.29	13.33	17.14	15.00	75.76	100.76	0	0	0	0	0	Not Ready	100.76
Atascadero Creek Watershed Management Plan	City of Atascadero	North County	Concept	Project Category	$250K-$500K	1_1_2014	Pass	5	0	0	5	25	12.00	17.14	10.00	17.14	12.50	68.79	98.79	0	0	0	0	0	Not Ready	98.79
North County Precision Irrigation Research Program Precision Agriculture	Upper Salinas Las Tablas Resource Conservation District	North County	Project	Project Category	<$250K	1_1_2014	Pass	5	0	5	10	25	14.00	14.29	10.00	5.71	17.50	61.50	96.50	0	0	0	0	0	Not Ready	96.50
Water-wise program (with target applied irrigation rates)	US-LT RCD	North County	Project	Project Category	<$250K	12:00:00 AM	Pass	5	0	5	10	25	12.00	2.86	10.00	8.57	20.00	53.43	88.43	0	0	0	0	0	Not Ready	88.43
Toad Creek flood control, restoration and basin re-charge	Upper Salinas-Las Tablas Resource Conservation District	North County	Project	Project Category	$500K-$1M	Undetermined	Pass	5	0	0	5	25	10.00	11.43	6.67	17.14	10.00	55.24	85.24	0	0	0	0	0	Not Ready	85.24
Irrigation Distribution System at Paso Robles Airport Area	Paso Robles Agricultural Alliance for Groundwater	North County	Concept	Project Category	>$5M	7_1_2014	Pass	5	0	5	10	20	12.00	2.86	20.00	-	20.00	54.86	84.86	0	0	0	0	0	Not Ready	84.86
Supplemental Water Supplies for Paso Robles Groundwater Basin	Various	North County	Project	Project Category	>$5M	1_1_2014	Pass	5	0	5	10	25	12.00	2.86	13.33	5.71	12.50	46.40	81.40	0	0	0	0	0	Not Ready	81.40
Community Based Social Marketing - Paso Groundwater Basin Community (water quality &	Upper Salinas Las Tablas Resource Conservation District	North County	Project	Project Category	<$250K	1_1_2014	Pass	0	0	5	5	20	12.00	5.71	6.67	-	20.00	44.38	69.38	0	0	0	0	0	Not Ready	69.38
North County Strategic Plan	Institute for Advanced Technology & Public Policy, Cal Poly, San Luis Obispo	North County	Concept	Project Category	$1M-$5M	7_6_1905	Pass	5	0	0	5	25	4.00	14.29	6.67	2.86	10.00	37.81	67.81	0	0	0	0	0	Not Ready	67.81
Recycled Water Treatment and Distribution System - Phase 1	City of Paso Robles	North County	Project	Project Category	>$5M	1_1_2018	Pass	5	0	0	5	15	16.00	-	13.33	-	17.50	46.83	66.83	0	0	0	0	0	Not Ready	66.83
Recycled Water Treatment and Distribution System - Phases 2 and 3	City of Paso Robles	North County	Project	Project Category	>$5M	1_1_2025	Pass	5	0	0	5	15	16.00	-	13.33	-	17.50	46.83	66.83	0	0	0	0	0	Not Ready	66.83
Groundwater Monitoring Program and Modeling Program for the Paso Robles Groundwater Basin	Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS)	North County	Concept	Project Category	>$5M	n_a	Pass	5	0	0	5	15	8.00	-	20.00	-	17.50	45.50	65.50	0	0	0	0	0	Not Ready	65.50
Community Water Systems for Subdivided Regions Overlying the Paso Robles Groundwater Basin	Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS)	North County	Concept	Project Category	$1M-$5M	n_a	Pass	0	0	0	0	15	12.00	-	16.67	-	20.00	48.67	63.67	0	0	0	0	0	Not Ready	63.67
Paso Robles Groundwater Basin In-Lieu Recharge Study and Preliminary Layout	Paso Robles Agricultural Alliance for Groundwater	North County	Concept	Project Category	>$5M	n_a	Pass	5	0	0	5	15	10.00	-	13.33	-	20.00	43.33	63.33	0	0	0	0	0	Not Ready	63.33
Tracking and Conserving Vineyard Irrigation Water in the Paso Robles Groundwater Basin	Vineyard Team	North County	Project	Project Category	$250K-$500K	any	Pass	5	0	0	5	15	8.00	-	10.00	-	17.50	35.50	55.50	0	0	0	0	0	Not Ready	55.50
Vertical Well Project for HRCSD	Heritage Ranch Community Services District	North County	Project	Project Category	$250K-$500K	12:00:00 AM	Pass	0	0	0	0	20	10.00	2.86	-	5.71	10.00	28.57	48.57	0	0	0	0	0	Not Ready	48.57
Arroyo Grande Creek Channel Waterway Management Program	San Luis Obispo County Flood Control and Water Conservation District, Zone 1_1A	North County	Project	Project Category	>$5M	12:00:00 AM	Pass	5	0	5	10	10	-	11.43	-	11.43	-	22.86	42.86	0	0	0	0	0	Not Ready	42.86
Emergency Water Turnout for Heritage Ranch CSD	Heritage Ranch CSD	North County	Project	Project Category	<$250K	04_01_13	Pass	5	0	0	5	15	10.00	2.86	-	-	7.50	20.36	40.36	0	0	0	0	0	Not Ready	40.36
County Service Area 7A - Oak Shores - Interception Sewer System Replacement	County of San Luis Obispo	North County	Concept	Project Category	>$5M	7_1_2013	Pass	5	0	0	5	15	6.00	2.86	-	-	7.50	16.36	36.36	0	0	0	0	0	Not Ready	36.36
Toad Creek Waterway Management Program	SLO County Flood Control and Water Conservation District	North County	Concept	Project Category	<$250K	12:00:00 AM	Pass	5	0	0	5	10	-	11.43	-	8.57	-	20.00	35.00	0	0	0	0	0	Not Ready	35.00
CSA 16 - Waterline - Replace Centre Street	San Luis Obispo County Flood Control & Water Conservation	North County	Project	Project Category	$1M-$5M	7_1_2012	Pass	0	0	0	0	10	8.00	-	-	-	7.50	15.50	25.50	0	0	0	0	0	Not Ready	25.50
21st Street Reservoir Reconstruction	City of Paso Robles	North County	Project	Project Category	>$5M	1_1_2017	Pass	0	0	0	0	15	4.00	-	-	2.86	2.50	9.36	24.36	0	0	0	0	0	Not Ready	24.36
San Miguel Flood Control Program	San Luis Obispo County Flood Control and Water Conservation District	North County	Concept	Project Category	$1M-$5M	12:00:00 AM	Pass	0	0	5	5	5	-	-	-	8.57	-	8.57	18.57	0	0	0	0	0	Not Ready	18.57
San Miguel Community Services District Water System Improvements - Disadvantaged Community	San Miguel Community Services District - Disadvantaged Community	North County	No Response	Project Category	$500K-$1M	1_15_2013	Fail	0	0	5	5	5	2.00	-	-	-	-	2.00	12.00	0	0	0	0	0	Not Ready	12.00
CSA 16 (Shandon) Water Reliability Project	County of San Luis Obispo	North County	Concept	Project Category	>$5M	6_26_1905	Fail	5	0	0	5	0	-	-	-	-	-	-	5.00	0	0	0	0	0	Not Ready	5.00
Meadow Creek Watershed And Flood Reduction Plan	Coastal San Luis Resource Conservation District and	South County	Project	Project Category	$250K-$500K	Ready to proceed as	Pass	5	0	5	10	25	10.00	17.14	6.67	20.00	20.00	73.81	108.81	0	0	0	0	0	Not Ready	108.81
NCMA NMMA Salt and Nutrient Management Plan (SNMP)	City of Arroyo Grande	South County	Project	Project Category	$250K-$500K	1_1_2014	Pass	5	0	5	10	25	18.00	14.29	13.33	5.71	17.50	68.83	103.83	0	0	0	0	0	Not Ready	103.83
Santa Maria Groundwater Basin Groundwater Flow Model	NCMA Agencies (Oceano Community Services District,	South County	Project	Project Category	$500K-$1M	7_1_2014	Pass	5	0	5	10	25	18.00	8.57	16.67	5.71	17.50	66.45	101.45	0	0	0	0	0	Not Ready	101.45
Lopez Lake Spillway Raise Project	Zone 3 Agencies (Cities of Arroyo Grande, Grover Beach	South County	Project	Project Category	>$5M	Not Available	Pass	5	0	5	10	25	18.00	2.86	13.33	14.29	17.50	65.98	100.98	0	0	0	0	0	Not Ready	100.98
See Canyon Watershed Management Plan	Central Coast Salmon Enhancement	South County	Concept	Project Category	<$250K	12:00:00 AM	Pass	5	0	0	5	25	6.00	17.14	6.67	17.14	12.50	59.45	89.45	0	0	0	0	0	Not Ready	89.45
Lopez Pipeline Improvements	Northern Cities Management Area (NCMA) Agencies: Oceano Community Services	South County	Project	Project Category	$1M-$5M	10_1_2013	Pass	5	0	5	10	25	14.00	2.86	6.67	11.43	17.50	52.45	87.45	0	0	0	0	0	Not Ready	87.45
Alternatives Analysis and BMP Implementation Plan for the Oso Flaco Watershed	Coastal San Luis Resource Conservation District	South County	Project	Project Category	<$250K	when funds available	Pass	5	0	0	5	25	8.00	14.29	10.00	8.57	15.00	55.86	85.86	0	0	0	0	0	Not Ready	85.86
Los Berros Creek Floodplain Restoration: Phase 2 Design and Implementation	Coastal San Luis Resource Conservation District	South County	Project	Project Category	$500K-$1M	1_1_2015	Pass	5	0	5	10	25	6.00	11.43	3.33	17.14	10.00	47.90	82.90	0	0	0	0	0	Not Ready	82.90

Regional Recycled Water System (Pismo Beach and SSLOCSD)	City of Pismo Beach	South County	Concept	Project Category	>$5M	4_1_2015	Pass	5	0	5	10	20	16.00	2.86	13.33	-	17.50	49.69	79.69	0	0	0	0	0	Not Ready	79.69
Los Berros Creek Floodplain Restoration: Phase I Acquisition and Agricultural Berm Removal	Coastal San Luis Resource Conservation District	South County	Project	Project Category	$500K-$1M	7_1_2014	Pass	5	0	5	10	25	6.00	11.43	3.33	11.43	12.50	44.69	79.69	0	0	0	0	0	Not Ready	79.69
Pismo Beach Recycled Water System	City of Pismo Beach	South County	Project	Project Category	$1M-$5M	10_1_2014	Pass	5	0	5	10	20	16.00	2.86	13.33	-	17.50	49.69	79.69	0	0	0	0	0	Not Ready	79.69
Arroyo Grande Creek Watershed Program	Central Coast Salmon Enhancement	South County	Project	Project Category	$1M-$5M	12:00:00 AM	Pass	5	0	5	10	25	2.00	11.43	3.33	14.29	10.00	41.05	76.05	0	0	0	0	0	Not Ready	76.05
Conjunctive Use and Groundwater Banking Evaluation	Oceano Community Services District	South County	Concept	Project Category	<$250K	12:00:00 AM	Pass	5	0	5	10	15	16.00	-	13.33	-	17.50	46.83	71.83	0	0	0	0	0	Not Ready	71.83
Oceano Drainage Improvement Project - Hwy 1 & 13th Street	County of San Luis Obispo, Department of Public Works	South County	No Response	Project Category	$1M-$5M	7_1_2010	Pass	5	0	5	10	20	2.00	-	6.67	17.14	7.50	33.31	63.31	0	0	0	0	0	Not Ready	63.31
Feasibility Study for Recycled Water for Agricultural Use	Coastal San Luis Resource Conservation District	South County	Project	Project Category	<$250K	Ready to proceed as	Pass	5	0	5	10	20	8.00	5.71	6.67	-	12.50	32.88	62.88	0	0	0	0	0	Not Ready	62.88
Flood Control Zone 3 - Lopez WTP Sludge Bed 1 & 2 Upgrades	San Luis Obispo County Flood Control & Water Conservation	South County	Project	Project Category	$250K-$500K	7_1_2016	Pass	5	0	5	10	15	8.00	-	3.33	-	7.50	18.83	43.83	0	0	0	0	0	Not Ready	43.83
Lopez Water Treatment Plant Membrane Rack Addition	San Luis Obispo County Flood Control and Water Conservation District	South County	Project	Project Category	$500K-$1M	7_1_2013	Pass	5	0	5	10	10	10.00	-	-	-	12.50	22.50	42.50	0	0	0	0	0	Not Ready	42.50
Mid-Higuera Bypass	City of San Luis Obispo	South County	Project	Project Category	$1M-$5M	6_1_2017	Pass	5	0	5	10	10	-	5.71	-	8.57	-	14.29	34.29	0	0	0	0	0	Not Ready	34.29
Lopez Water Project Habitat Conservation Plan	San Luis Obispo County Flood Control and Water Conservation District	South County	Project	Project Category	$1M-$5M	1_1_2018	Pass	5	0	5	10	10	4.00	2.86	-	-	-	6.86	26.86	0	0	0	0	0	Not Ready	26.86
Nacimiento Water Project Energy Recovery Turbine	City of San Luis Obispo	South County	Project	Project Category	$1M-$5M	1_1_2014	Pass	5	0	5	10	10	4.00	2.86	-	-	-	6.86	26.86	0	0	0	0	0	Not Ready	26.86
Beach Street Alley Waterline Replacement	Oceano Community Services District	South County	Project	Project Category	<$250K	TBD (Pending	Pass	5	0	5	10	5	8.00	-	-	-	-	8.00	23.00	0	0	0	0	0	Not Ready	23.00
Recycle Water Distribution System Expansion	City of San Luis Obispo	South County	Project	Project Category	$250K-$500K	1_1_2014	Pass	0	0	5	5	5	12.00	-	-	-	-	12.00	22.00	0	0	0	0	0	Not Ready	22.00

G-5 Project Form Review Paper

San Luis Obispo
Integrated Regional Water Management (IRWM)
Project Form Review (PFR)
White Paper

November 12, 2013
DRAFT
For Review by Project Sponsors

November 12, 2013 Project Sponsor Review Working Draft

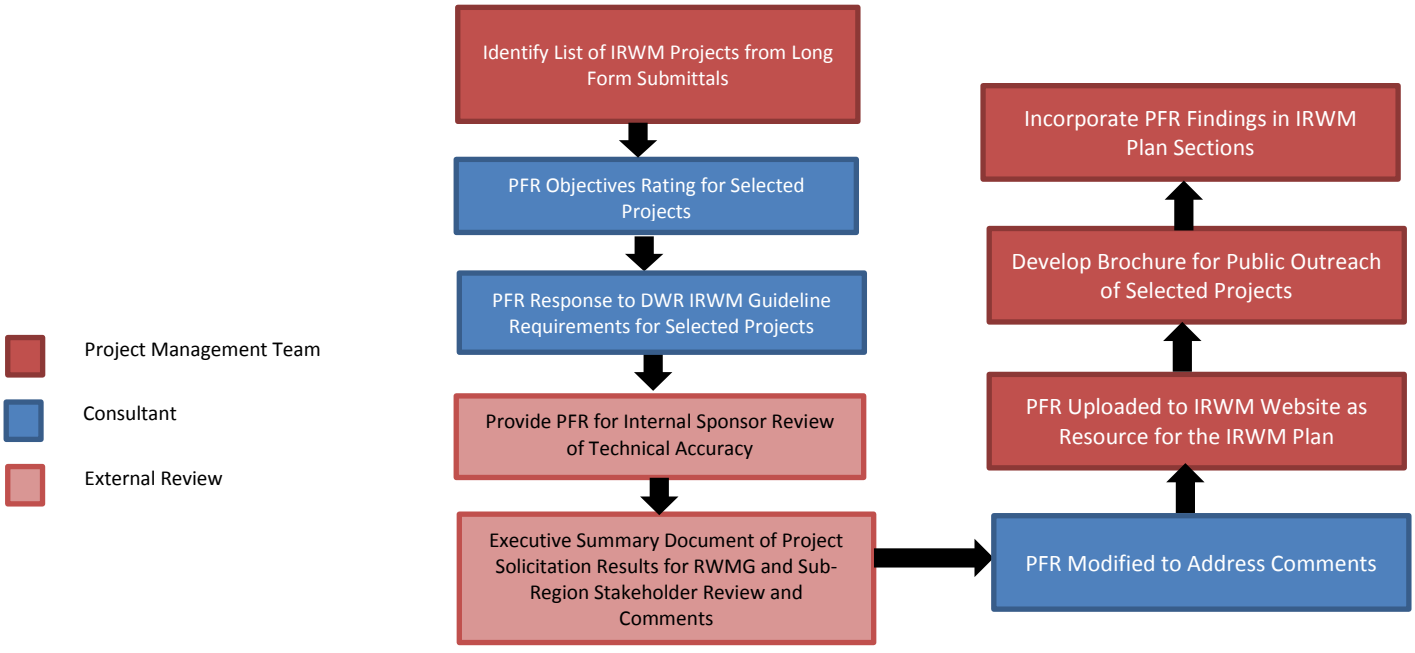
Table of Contents

Purpose

Throughout the period from June 2013 to October 2013, the 2013 IRWM Plan Project Management Team (PMT) through the Regional Water Management Group (RWMG) solicited projects and programs for purposes of including approximately ten (10) of the "best" projects in the plan. As explained in **Section I – Project Solicitation and Prioritization**, all concepts, projects/programs are included in the Project List of **Appendix H – Project List and Integration** (as is this paper). Of the 103 submittals, 38 of those were classified as projects, and only 23 were identified as being of high value to the IRWM Plan based on the scoring and rating methodology described in Section I. Sponsors of the high value projects were encouraged to submit a Phase 2 – Long Form project description to provide: 1.) the full project description, 2.) the project type(s), 3.) detailed information including cost, financing and schedule , 4.) relationships with State Priorities and Resource Management Strategies (RMS), and 5.) the project effects to climate change.

The purpose of this Project Form Review Paper (PFR) is to carefully describe the 15 selected projects of the 23 high value projects selected by the PMT as the cross-section of projects and programs with the highest degree of uniformity and certainty in meeting the IRWM Plan's Goals and Objectives, and the highest degree of confidence of project implementation in the next 1 to 3 years (i.e., a high readiness-to-proceed (RTP)). The descriptive information presented in the PFR for each of the selected projects follows the November 2012 State Guidelines in the preparation of an IRWM Plan.

The flowchart below summarizes the Detailed Project Review process and who is responsible for completing each step.



The PFR is not comparing the projects for which is best; rather, the goal is to address the State Guidelines for

each high value project in one document and to present the reasons why the projects are technically feasible and strategically suited to belong in the IRWM Plan. The ultimate goal is to use the PFR as a resource document for purposes of presenting the detailed project-based material in the IRWM Plan. In addition, as an Appendix to the Plan, the PFR provides additional detail in one location if questions or concerns are raised in the Public Draft review process as to the basis for why projects were selected.

High Value Long Form Project List

The full list of Project Long Forms is presented in the table below with a brief reason why the project was, or was not, included in the PFR. All included projects have a high RTP except for North Coast Sub-Region where medium RTP projects are included because no high RTP projects were identified. Sub-Region distribution of projects is considered a criterion for project selection.

PFRNo.	Project Code	Project Title	Primary Reason for In or Out of IRWM Plan
1	**MLTP_ECO1**	Livestock & Land Program	Included for its multi-objective regional benefits and water quality enhancement while gaining private property owner volunteer participation for purposes of environmental stewardship.
	MLTP_FLD1	Water Conservation Corps	Not included due to low RTP.
	MLTP_WMT1	County-Wide Watershed Awareness Campaign	Not included due to medium RTP and lower total Objectives-based point score.
2	**MLTP_WMT2**	LID Pilot Program	Included for its public education and outreach, as well as targets private property owners to volunteer and pay for LID projects with monetary rebate incentives.
3	**NCNT_ECO1**	North County Fertilizer Regions_ Precision Agriculture	Included for its wide public educational value and regional water quality benefits through volunteer participation by private property owners with reduced fertilizer cost incentives.
4	**NCNT_ECO2**	Attiyeh Ranch Conservation Easement	Included for public and environmental stewardship values; both resulting in the protection of the watershed and endangered flora and fauna species in the region.
	NCNT_FLD1	Upper Salinas watershed plans	Not included due to medium RTP.
5	**NCNT_GWM1**	Atascadero Groundwater Basin Augmentation Expansion Project	Included because of the multi-objective elements of improving recycled wastewater for higher beneficial use as a source for groundwater recharge and potable supplies in the Salinas Underflow.
6	**NCNT_WMT1**	Community Based Social Marketing	Included due to its low cost high education value over a broad region, enlisting support of private property owners to take ownership of their environment, and improving sustainable farming and business practices.
7	**NCNT_WMT2**	Improving On Farm Water Management Through Demonstration, Research & Outreach of Precision Agricultural Best Management Practices	The project is a teamed effort by two project sponsors. Included for its high public educational value and regional water demand reduction benefits over a critically impacted groundwater basin, and offers change in irrigation practices through volunteer participation by private property owners with reduced pumping cost incentives.
8	**NCNT_WSP1**	City of Paso Robles Lake Nacimiento Water Treatment Plant Construction	Included due to its maximizing existing supplemental water supplies in a critically impacted groundwater basin, and use as a conjunctive supply for drought protection and effects of climate change in the region.
9	**NCNT_WSP2**	San Miguel Critical Water System Improvements	Included due to the DAC need for critical water system improvements.
	NCST_ECO1	Water Conservation Partnerships in Chorro Valley	Not include due to low RTP and low total Objectives-based point score.
10	**NCST_GWM1**	8th Street Upper Aquifer Well and Nitrate Removal Facility	Included for its multi-Objective values of managing a critical groundwater basin subjected to continuous degradation of water quality from septic systems (nitrates) and sea water intrusion, and the local collaboration between the agencies and public using a vetted management plan.
11	**NCST_FLD1**	Los Padres CCC Center - Stormwater LID Treatment Project	Included for its multi-Objective benefits of environmental stewardship, LID educational opportunities, and the conversion of private lands to restore a rich ecosystem of flora and fauna.
	SCNT_FLD1	Mid-Higuera Bypass	Not included due to its medium RTP and low Objectives point score.
12	**SCNT_FLD2**	Oceano Drainage Improvement Project - Hwy 1 & 13th Street	Included due to multi-Objective elements of providing a DAC with health and safety along with water quality, groundwater recharge, and flood attenuation.
13	**SCNT_WMT1**	Lopez Water Treatment Plant Membrane Rack Addition	Included due to increased use of existing surface water supplies and reduction in groundwater use in a constrained groundwater basin shared by multiple agencies and private well owners.
	SCNT_WSP1	Lopez Lake Spillway Raise Project	Not included due to low RTP.
14	**SCNT_WSP2**	Recycle Water Distribution System Expansion	Included due to increased recycled water use in a DAC with the benefit of reducing groundwater pumping in a constrained groundwater basin.
	SCNT_WSP3	NCMA_NMMA Salt and Nutrient Management Plan (SNMP)	Not included due to medium RTP.
15	**SCNT_WSP4**	Pismo Beach Recycled Water Project	Included due to increased recycled water use through construction of a recycled water treatment plant. Recycled water will be made available in a constrained groundwater basin where imported surface water supplies are necessary. A high level of support from local stakeholders makes this a preferred project for the South County Sub-Region.

Geographic significance of project selection is considered in project selection to ensure each Sub-Region is equally represented in the IRWM Plan. The figure below identifies the approximate location of the capital projects, and programs, typically spread across large areas, are positioned at the approximate center of the area of benefit. Icons are positioned to avoid covering community names.

Objectives Scoring

The first step in the Detailed Project Review process places each project into an Objectives filter where a scoring system is applied to determine where a project succeeds in satisfying the IRWM Plans Goals and Objectives.[1] The scoring system in use is as follows:

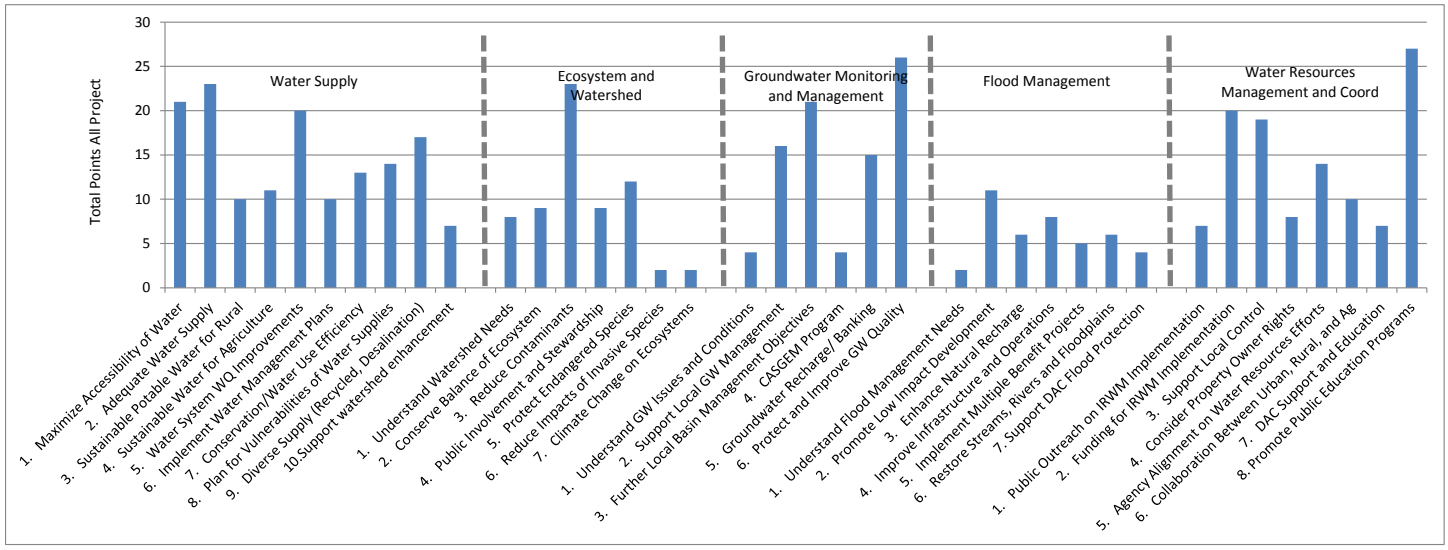
Score

1 – Project partially satisfies the Objective's intent but is not focused on achieving the Objectives intended outcome.

2 – Project is not directly aimed to satisfy the Objective's intended outcome, but Objective benefits can be measured as part of implementation.

3 – Project is directly aimed to meet the Objective's intended outcome and includes a monitoring program for quantifying the Objective benefits.

The figure below is a total for each Objective for all projects, and is used as a means of illustrating the level of uniformity of meeting the IRWM Plan's Goals and Objectives with the chosen suite of IRWM Projects. The information gathered from this exercise is further used in associating the Project Elements (i.e., derived from WMS and RMS) for each project as described in the individual in the Project Elements section and within each of the project reports.



[1]All information contained within the PFR is derived from the Long Form and Objectives Worksheet; however, in cases where a difference is noted, the PFR takes precedence over both documents.

Project Reports

Each Project Report is organized based on addressing the individual questions for each of the relevant IRWM Plan sections. The report begins with the project name, id, location, and a brief summary. Bolded portions of the summary are to point out the root activity(s) being applied, resulting benefits, and potential financing. The response to questions are derived from the PMT's review and understanding of the project based on the Long Form and resource documentation. As part of the Public review process, the project sponsors have had the opportunity to review the responses and allowed to comment on any concerns; especially, where technical experience of the PMT is applied in responding to questions based on provided information.

The order of the projects is based solely on an alphabetic sort of the Project ID and not on any ranking criteria. This creates a structure where projects of similar location and type are grouped together. The Project ID identifies the Sub-Region and the Project Goal Category as follows:

Project Sub-Region Abbreviations:

- MLTP – Multiple Sub-Regions
- NCST – North Coast
- SCNT – South County
- NCNT – North County

Project Goal Categories

- WSP – Water Supply
- ECO – Ecosystem and Watershed
- GWM – Groundwater Monitoring and Management
- FLD – Flood Management
- WMT – Water Resources Management and Communications

Goal Categories are typically based on the highest scoring goal in the Objectives Filter process (i.e., only one category is applied). The number following the Goal Category is sequential and is used as a unique identifier and for sorting purposes only.

Description Categories

The following provides a brief description of what is expected under each of the questions being asked of the projects by the PFR. To the extent possible, and with the information provided, the goal is to respond to each of the DWR November 2012 Guideline requirements. Essentially, the information provided herein is needed in the IRWM Plan for each of the selected projects.

(a) **Contribute to Plan Objectives**

Response is a brief description of how IRWM Objectives with a score of three (3) meet the Objective. Given the cross over and integration of IRWM Objectives, projects will meet various Goals and Objectives with varying levels of precision as explained above. The highest scoring Objectives are what make the project strategically viable to the Plan's success. A Secondary Objectives discussion is included for each project to highlight some of the less prominent integration opportunities that are not likely to be the reason for the project's selection for future IRWM Plan implementation.

(b) **Relate to WMS, RMS and Objectives**

The blank table below is taken from **Section I – Project Solicitation and Prioritization.** The purpose of this exercise is to provide the linkage between how DWR State Objectives translate into Resource Management Strategies (RMS) that equate in their implementation to the SLO Water Management Strategies (WMS). SLO Project Elements are the action building blocks of the IRWM to implement the WMS and result in achieving the Goals and Objectives listed and described in **Section C – IRWM Goals and Objectives**.

DWR State Objectives	DWR RMS	SLO WMS	SLO Recommended Project Elements	IRWM Objectives
•	•	•	•	

(c) **Technical Feasibility and Justification**

Technical Feasibility and Justification uses the Long Form responses, to the extent possible, which give factual data and references to the project's purpose and stated (or claimed) physical benefits. In cases where projects are more of a program nature, the stated processes and specific actions are listed along with intended benefits and cost.

(d) **Benefit DACs**

Responds to whether the project provides direct DAC benefits through the implementation of the stated Project Elements. Secondary benefits to a DAC may be included in this discussion if it is not directly apparent in the Contribute to Plan Objectives or Technical Feasibility and Justification heading.

(e) **Environment Justice**

Environmental Justice addresses issues of impact to low income areas that occur either as a result of project construction or project implementation. Benefits of project implementation to low income areas may be included if directly targeted to this purpose.

(f) **Cost and Financing**

Provides estimated costs of the project and need for financing through grant programs. Costs are typically broken out into capital and labor costs, and O&M costs. Labor costs can often be met through in kind services by the sponsoring agency to meet any necessary local cost share for grant funding.

(g) **Feasibility through Economic Analysis**

The economic analysis of most projects needs should adhere to state methods of deriving benefits and monetizing the benefits, if possible. The response is based on the state method of analysis to be used and

what factors are proposed for assessing the total cost and benefit of project implementation. Benefits typically include some form of monetary value assignment. There are four primary methods of deriving an economic benefits analysis for a project as follows (taken from DWR November 2012 Guidelines):

> ***Section D1 – Cost Effectiveness Analysis.*** *For relatively small non-DAC projects (total project cost is less than $300,000) or projects that benefit a DAC (up to a total project cost of $1 million), applicants have the option of completing a Cost Effectiveness Analysis. This option evaluates whether the physical benefits provided by the project are provided at the least possible cost, or not.*
>
> *Applicants may not split a single project into multiple smaller components or phases in order to be eligible for the cost effectiveness analysis option.*
>
> ***Section D2 – Non-Monetized Benefit Analysis****. For projects where benefits cannot be monetized, a Non-Monetized Benefit Analysis should be completed. This analysis requires a description (where possible) of applicable social, environmental stewardship, and sustainability benefits that may result from the implementation of a project.*
>
> ***Section D3 – Monetized Benefits Analysis.*** *For projects which do not fall in Section D1 option and benefits can be quantified in dollar terms (excluding flood damage reduction (FDR) benefits), a Monetized Benefits Evaluation should be completed.*
>
> ***Section D4 – Flood Damage Reduction Benefit Analysis.*** *For projects with FDR benefits, determination of the expected annual damages with and without the project should be completed.*
>
> Lastly, if the RWMG recommends their own method, the following is applied:
>
> ***Section D5 – Proposal Costs and Benefits Summary.*** *Annual costs must be provided for each individual project; and a benefit-cost summary must be presented for the entire proposal, regardless of benefit analysis method or options used.*

(h) **Project Readiness to Proceed**

Readiness of a project to move forward to implementation in a short amount of time is a critical criterion to the IRWM Plan's success. If funding sources do present themselves as part of IRWM Plan implementation, the projects included in the IRWM Plan should be ready to proceed, if selected for implementation. The timeframe for beginning and ending the project is typically provided as a response to this criterion.

(i) **Strategic Implementation of the Plan and Project Merit**

Includes a discussion of how the project adds value to the IRWM Plan by being multi-objective, multi-regional, and/or addresses issues that are not included in other projects and have a high likelihood of implementation success. Project sponsors' level of effort in following through with what is stated in the Long Form and bringing their project to a high readiness to proceed is critical to the IRWM Plan merit and success.

(j) **Climate Change Effects**

This states whether the project has an effect on climate change conditions, or, conversely, if the project includes climate change adaptation. In all cases, projects typically have no appreciable GHG production to impact climate change negatively.

(k) **Reducing GHG compared to Project Alternatives**

The study of GHG reduction for purposes of minimizing climate change impacts is not typically done under mitigated negative declaration CEQA review unless a full EIR is required. In addition, projects with older

EIRs, may not include this analysis, so a discussion is included in this section of when, or if, a GHG alternative analysis will be performed. This is addressed further in **Section H – Mitigating or Adapting to Climate Change**.

(l) **Project Sponsor to adopt IRWM Plan**

A simple response of either yes or no on whether or not the sponsoring agency plans to adopt the IRWM Plan upon its final completion.

(m) **Reduce Dependence on Delta Supplies**

If the project is reliant on SWP water, projects affecting the need for the SWP are evaluated and qualitatively described based on the anticipated level of benefit to reduced SWP reliance.

(n) **Potential Impacts and Benefits of Project Implementation**

Provides a summary of impacts and benefits listed in the Long Form with the level of specificity based on how far along the project is in the planning and design phases of implementation. A qualitative discussion of water resources benefits is provided for purposes of evaluating climate change benefits/impacts.

(o) **When a more Detailed Project-Specific Impact and Benefit Analysis will Occur**

Project-specific impact benefit analyses are not typically done in accordance with state standards. In most cases, this level of analysis will not be done until required to do so for purposes of grant funding or loans. Most project sponsors have the analysis spread through many documents and in their minds, but not compiled and on paper.

(p) **What is Proposed Methods of Monitoring Project Performance**

Monitoring of specific metrics is required for each project based on the benefits and IRWM Objectives being met. In most cases, the metrics are physical in nature and can be monitored through standard practices applying the latest technology. In cases where benefits are difficult to capture, other, more qualitative metrics are used as an indicator of the potential benefits; especially, if implemented on a larger scale. For example, the number of times the implementation of a best management practice is practiced could be an indicator of the improvement to water quality, since the water quality benefits themselves are difficult to capture in smaller scale or pilot-level projects.

(q) **Known and Possible Funding Sources**

Lists the known and possible funding sources based on the Long Form responses and what is provided in **Section M – Financing Strategies**.

(r) **Funding Mechanisms, Including Water Rates, etc.**

Describes how the proposed funds are collected, providing assurance that monies will be available to see that implementation, monitoring, and O&M are secured prior to project approval.

(s) **How O&M Costs for Projects will be Covered**

Describes which funding source(s) is to be used for specifically O&M. The table following this description is based off of a questionnaire provided to the stakeholders for identification of finance options and their certainty. In many cases, the funding options include grants from state and federal grant and loan programs based on the type and status of the project.

(t) **Process that Considers GHG Emissions when Choosing between Project Alternatives**

Responds to whether a process was used in the selection of the project that considered GHG emissions. In most cases the project did not go through a rigorous project alternatives analysis including GHG emissions. The IRWM Plan will provide a discussion of the GHG emission concerns in **Section H – Mitigating or Adapting to Climate Change.**

Project Elements

As defined in **Section I – Project Solicitation and Prioritization**:

> *Project Elements are "building blocks" of region-specific activities derived from a thorough evaluation of the State's Resource Management Strategies (RMS) (**Section G – Resource Management Strategies**), and applied local Water Management Strategies (WMS), which consist of activities to promote the Goals and Objectives (**Section C –Goals and Objectives)** of the Updated Plan.*

For each project, the PFR defines how specific RMS and WMS are satisfied starting with the Statewide Objectives and ending in meeting the IRWM Objectives. Project Elements are developed within the PFR to describe the activity needed to bridge the gap between what is the strategy being implemented and the expected results (or Objectives). The collection of Project Elements succeeds in providing the essential activities of each project.

The overlap of Project Elements amongst the high value projects illustrates the types of activities targeted for the IRWM region. The value of this understanding can further shape the high value projects or create additional and perhaps integrated projects where Project Elements are applied to several projects under one project/program umbrella. The synergism of combining related projects and sharing in the resources and learning from the combined efforts, are available if project sponsors want to improve the opportunity for outside funding.

The table below presents the projects and Project Elements, illustrating the level of overlap within the Sub-Regions. Since the Project Elements speaks to the activity or planned facility construction, they offer a quick means of understanding the projects without having to go to each project's review.

Table -1. Project Elements

PFR No.	Project Code	Project Title	Project Elements											
			Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater	Provide public education in the value of conserving water for purposes of achieving sustainable surface water and groundwater drinking water supplies	Provide public incentives to gain volunteer change in on-site water use and handling practices	Provide cost-effective alternatives to private property owners in managing on-site sources of contamination.	Create and preserve natural ecosystems and protect endangered flora and fauna through Land Stewardship and Conservation Easement programs	Develop and improve water and wastewater treatment facilities to reduce point source discharges of contaminants to natural streams	Develop and Improve methods of water reuse within a community	Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies	Develop new groundwater management projects to improve the quality and quantity of groundwater in accordance with a regional stakeholder-based groundwater basin plan	Develop methods of adapting to Climate Change and other vulnerabilities to the region's water resources	Attenuate storm flows and improve stormwater quality by increasing on-site retention and detention controls	Seek outside funding for water and flood control projects in low income areas
1	MLTP_ECO1	Livestock & Land Program	■	■	■	■								
2	MLTP_WMT2	LID Pilot Program	■	■	■	■							■	
3	NCNT_ECO1	North County Fertilizer Regions_ Precision Agriculture	■	■	■	■								
4	NCNT_ECO2	Attiyeh Ranch Conservation Easement	■				■							
5	NCNT_GWM1	Project 5. Upper Salinas River Basin Water Conservation/Conjunctive Use Project						■	■	■				
6	NCNT_WMT1	Community Based Social Marketing	■	■	■	■								
7	NCNT_WMT2	Improving On Farm Water Management Through Demonstration, Research & Outreach of Precision Agricultural Best Management Practices	■											
8	NCNT_WSP1	City of Paso Robles Lake Nacimiento Water Treatment Plant Construction								■	■			
9	NCNT_WSP2	San Miguel Critical Water System Improvements								■				■
10	NCST_GWM1	8th Street Upper Aquifer Well and Nitrate Removal Facility								■	■			
11	NCST_FLD1	Los Padres CCC Center - Stormwater LID Treatment Project	■				■		■			■		
12	SCNT_FLD2	Oceano Drainage Improvement Project - Hwy 1 & 13th Street	■										■	■
13	SCNT_WMT1	Lopez Water Treatment Plant Membrane Rack Addition								■	■			
14	SCNT_WSP2	Recycle Water Distribution System Expansion								■	■			
15	SCNT_WSP4	Pismo Beach Recycled Water Project						■	■	■				■

Project 1. Livestock & Land Program

1.1 Project Number: MLTP_ECO1

1.2 Project Location: Countywide

1.3 Project Sponsor: CSLRCD and US-LTRCD

Coastal San Luis Resource Conservation District (CSLRCD) and Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)

Source: Image of Local Horse Property

1.4 Project Summary:

The Livestock and Land (L&L) Program addresses natural resource concerns faced by livestock owners by providing **education, technical assistance and cost share** for implementation of management measures. Water quality improvements will be achieved by **giving livestock owners the tools to complete water quality site assessments** and to **implement Best Management Practices near listed waterways**. The behavioral and management practice changes achieved by this program will provide immediate and lasting water quality and watershed improvements by reducing the off-site mobilization of manure, urine and sediments from livestock facilities. The program will make significant progress toward watershed goals listed in TMDLs and watershed plans.

Related website: http://livestockandland.org/

Available Source Documents: *County General Plan Conservation and Open Space Element; Agriculture Element*

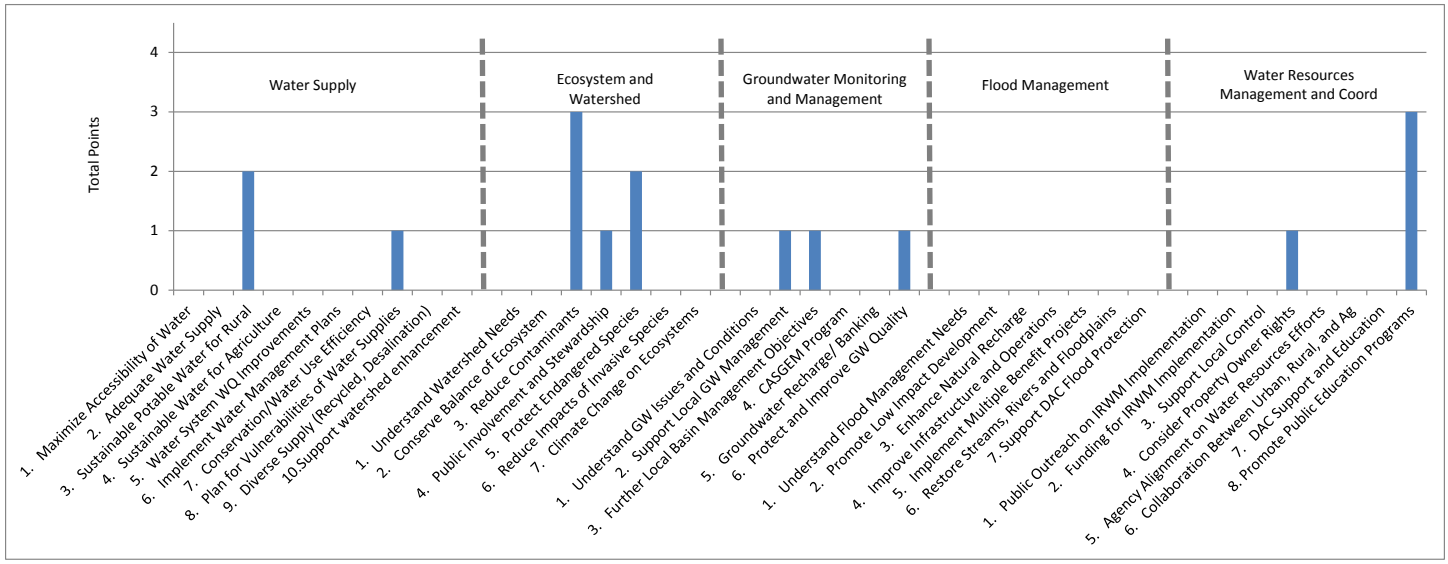
1.1 IRWM Plan Section Information and Analysis:

1.1.1 *Project Solicitation and Ranking*

How does the project:

(a) **Contribute to Plan Objectives**

Project satisfies the following Objectives:



***Ecosystem* – Reduce Contaminants**

L&L Program targets non-point source (NPS) discharges to natural water ways through education and best management practices on private lands hosting livestock animals. The program could lead to larger scale implementation throughout region if benefits are shown to exist from its implementation.

***Water Resources Management* – Promote Public Education**

The focus of the L&L Program is on educating private land owners hosting livestock. Bringing awareness to land owners and relatively inexpensive practices can achieve a true benefit to the water quality in the region.

Secondary Objectives

While difficult to monitor, containment of livestock waste with positive barriers to deep percolation lead to improved rural drinking water quality from shallow private wells. At a large scale of implementation, possible downstream benefits of preventing runoff of contaminants include protection of endangered species.

(b) **Relate to WMS, RMS and Objectives**

SLO Recommended Project Elements are identified as follows:

DWR State Objectives	DWR RMS	SLO WMS	SLO Recommended Project Elements	IRWM Objectives
• Improve Water Quality • Practice Resources Stewardship	• Pollution Prevention • Ecosystem Restoration	• Environmental and Habitat Protection • NPS Pollution Control • Water Quality Protection and Improvement	• Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater. • Provide cost-effective alternatives to private property owners in managing on-site sources of contamination.	• Reduce Contaminants • Promote Public Education

(c) **Technical Feasibility and Justification**

Without the L&L Program, landowners would likely continue business as usual. The current land management approach has led to existing water quality impairments by sediment, nutrients and pathogens as demonstrated by the list of 21 impaired water bodies. TMDLs related to livestock and grazing would likely be addressed by the RWQCB on a slower timeline with less consistency between watersheds and with fewer region wide benefits.

Assumptions for water quality benefits of the program are based on modeling calculations. Assuming a site has 1 horse on 1 acre of land, and that the site is 500 ft from the nearest creek in area receiving 0.4 inches of precipitation, the resulting annual pollutant loads are shown in the table below.

Manure		**9.13**	**tons**
Nutrients			
	Total Nitrogen	102.20	lbs
	Total Phosphorus	40.15	lbs
Pathogens			
	Total Streptococcus	9.49E+13	colonies
	Fecal Coliform	1.53E+11	colonies

It is too difficult to estimate sediment load benefits without knowing the site specific characteristics. However, most projects will also have reductions to sediment loading that can be calculated with predictive analysis models.

Best management practices are typically aimed at better health of livestock and improving conditions around areas of livestock (e.g., fly reduction, smell, safety, etc.). Costs are not anticipated to be outside the expected cost of providing a sustainable environment for raising livestock.

(d) **Benefit DACs**

Program is not targeted to a DAC and does not have secondary benefits to downstream DAC.

(e) **Environment Justice**

Program does not impact low income communities.

(f) **Cost and Financing**

Program cost is estimated to be $318,000 to be expended over a period of ten years broken down into initial education, implementation, and monitoring in the first 2 to 3 years. Grant funding is being sought for all but the local cost share, identified as coming from in-kind labor services.

(g) **Feasibility through Economic Analysis**

Of the DWR methods for quantifying benefits, method Section D2 – Non-Monetized Benefits Analysis will likely be selected for the water quality benefits. The ability to assign benefits is tied to the ability to specifically measure the pollutant load reductions due to BMP implementation on project sites. However, given the larger uncontrolled watershed, of which the Project is a small portion, it is extremely difficult due to the nature and diversity of variables not only on the site, but also because the target pollutants have other sources upstream in the watershed (landslide loading of sediment for example).

(h) **Project Readiness to Proceed**

The project's status as a program, exempts it from permitting and CEQA review. Upon funding, the project could proceed immediately.

(i) **Strategic Implementation of the Plan and Project Merit**

Given the high population of small ranchette horse properties in the IRWM Plan region, the L&L program can assist greatly in improved water supplies and healthy ecosystem, and can have lasting effects in the standard practices of livestock management.

(j) **Climate Change Effects**

Given the small scale of the L&L program, it is not anticipated to affect climate change or be affected by it. GHG contribution from animal waste is a noted GHG concern for statewide livestock and dairy activities, but not addressed in this project.

(k) **Reducing GHG compared to Project Alternatives**

Given the program status, the L&L project does not require an alternative analysis.

(l) **Project Sponsor to adopt IRWM Plan**

Yes

(m) **Reduce Dependence on Delta Supplies**

Not Applicable

1.1.2 *Impact and Benefit*

Discuss:

(n) **Potential Impacts and Benefits of Project Implementation**

Benefits addressed above in Technical Feasibility and Justification heading. Project has the potential to benefit water quality leading to potential decreases in treatment costs downstream for potable supplies. Given the uncertainty of location and the small amount of change, the change in treatment operations cannot be quantified

(o) **When a more Detailed Project-Specific Impact and Benefit Analysis will Occur**

No further analysis is proposed beyond what has already been done.

1.1.3 *Plan Performance and Monitoring*

(p) **What is Proposed Methods of Monitoring Project Performance**

Project performance will be measured based on the number of private property livestock owners who volunteer and actually make physical and process changes in handling of animal waste on-site. Inspection will be limited, due to cost and intrusion. Baseline water quality samples will be taken in areas of highest participation for comparison at the end of the proposed 10-year monitoring period.

1.1.4 *Financing Strategies*

What is the plan for implementation and financing of project and programs including:

(q) **Known and Possible Funding Sources**

Grant monies, local government programs, and in-kind services.

(r) **Funding Mechanisms, Including Water Rates, etc.**

No targeted funding mechanism is identified due to low implementation cost.

(s) **How O&M Costs for Projects will be Covered**

Long term monitoring and reporting will be completed by project sponsor with in-kind services.

Project Code	Project Title	Project Cost	Question 1: Funding Source and % of Total Cost	Question 2: Certainty/Longevity	Question 3: O&M Finance Source
MLTP_ECO1	Livestock & Land Program	$250K-$500K	Local Contributions through Donations and In-Kind Services (CSLRCD and US-LTRCD)	In-kind labor from sponsoring agencies and reporting costs are fully funded	Not Required
			Grant Monies (Prop 84, 3rd Round; USEPA Watershed Grant Program)	None	

1.1.5 *Climate Change*

(t) **Process that Considers GHG Emissions when Choosing between Project Alternatives**

Not applicable to this project.

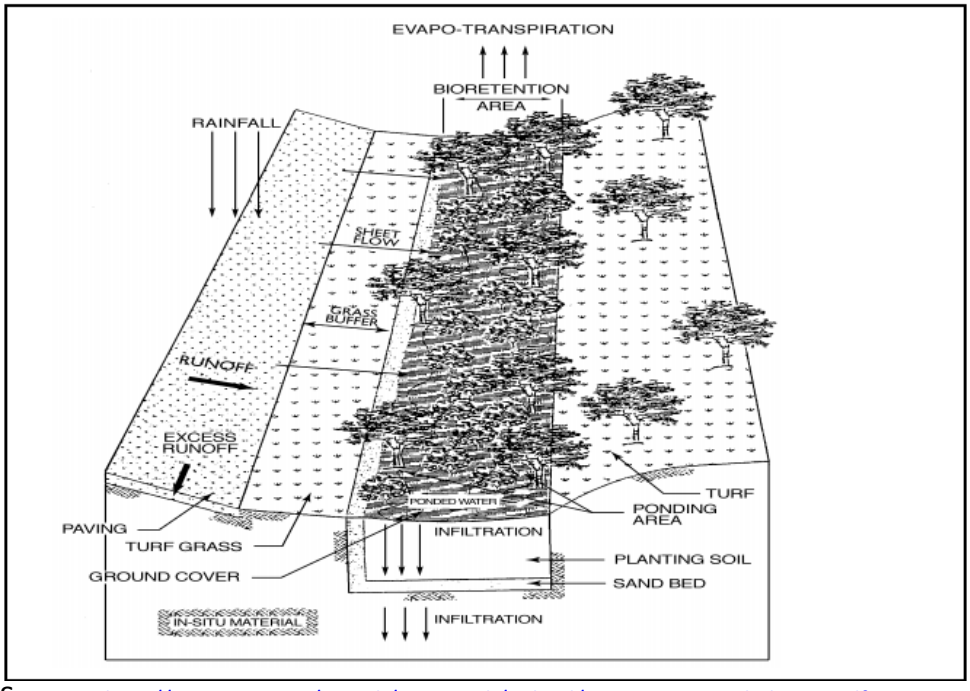
Project 2. Low Impact Development (LID) Pilot Program

2.1 Project Number: MLTP_WMT2

2.2 Project Location: North Coast and North County

2.3 Project Sponsor: US-LTRCD

Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)



Source: http://water.epa.gov/scitech/wastetech/upload/2002_06_28_mtb_biortn.pdf

2.4 Project Summary:

The Low Impact Development "Soak It Up" Rebate Program (Program) provides private property landowners in the North Coast and North County Sub-Regions rebates of up to 60% of the costs to install Low Impact Development (LID) features. The Program will include an **education and outreach program** available to all County residents regarding **stormwater impacts** of development and ways to reduce them. The US-LTRCD will provide **free landscape assessments** for property owners to determine appropriate LID strategies that can be implemented in order to reduce stormwater runoff and contamination. The property owner will receive a landscape assessment with site appropriate LID recommendations and plans. The property owner can build all or a portion of the LID features; and will pay for all costs of the installation. Those homeowners who build the features as per plan, pass an inspection, and sign a 10 year maintenance agreement with the RCD, can apply and **receive up to 60% of the total project cost**.

The development of a LID grant program for private landowners will implement elements of local watershed

plans with installation emphasis in severely drought affected watersheds, such as the Salinas River, Santa Rosa Creek, and San Simeon Creek. Strong support exists from both the civic community and the environmental community.

Available Source Documents: *County General Plan Conservation and Open Space Element*

2.5 IRWM Plan Section Information and Analysis:

2.5.1 *Project Solicitation and Ranking*

How does the project:

(a) **Contribute to Plan Objectives**

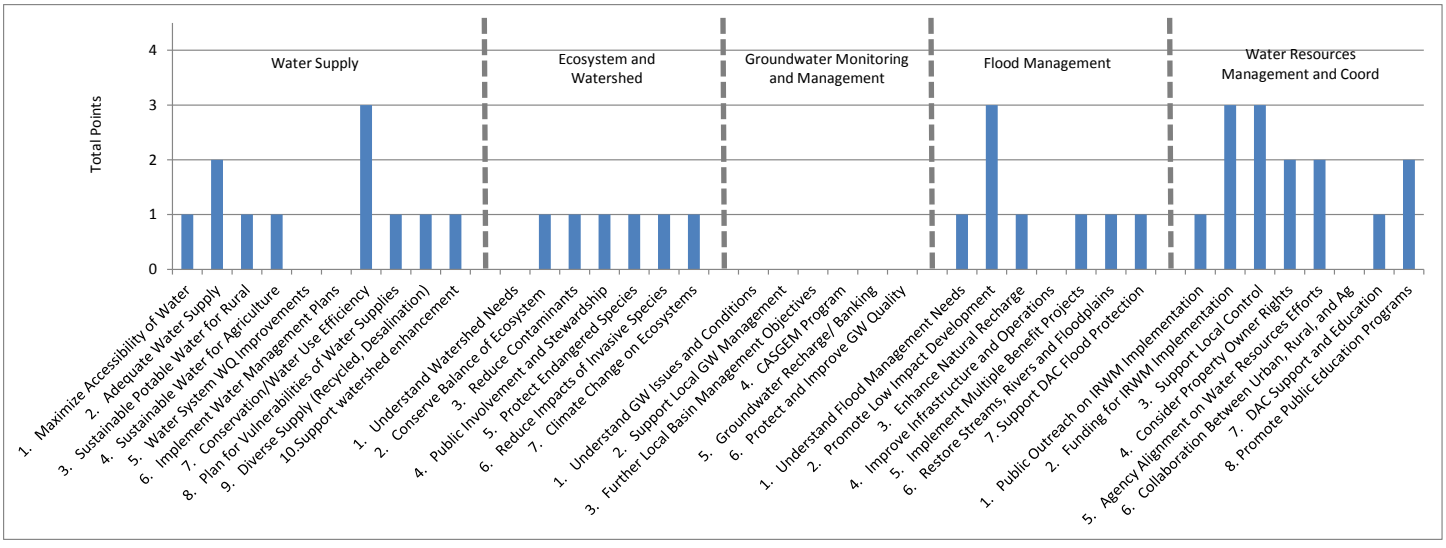
Project fully satisfies the following Objectives:

Water Supply - **Conservation/ Water Use Efficiency**

Opportunities for conducting free landscape assessments provide education and ideas to develop drought tolerant landscaping and efficient landscape irrigation to limit nuisance runoff in the peak irrigation season.

Ecosystem – **Reduce Contaminants**

Retention of urban private parcel on-site runoff will reduce the chemical and nutrient concentration in urban runoff, leading to an overall reduction from non-point source discharges throughout the IRWM region.



Flood Management – **Promote Low Impact Development**

The LID Pilot program is classified as a means of reducing the impact of stormwater runoff and contamination through parcel by parcel changes in how drainage is handled on-site. As such, the

opportunities to learn from this program, and implement cost-effective programs in new growth areas become beneficial.

Water Resources Management – **Funding for IRWM Implementation**

The project scale, cost and expected benefits are well balanced to succeed in achieving outside funding on behalf of landowners in the US-LTRCD.

Support Local Control

The pilot program will target local neighborhoods to assist them in their stewardship of natural resources - and alleviating the burden of trying a new technology and change in practices alone. All efforts and decisions will take place at the local level with county-wide visibility.

Promote Public Education

The program will create public education forums, exhibits, and materials to implement rebate program and bring awareness to the IRWM planning regions (i.e., North Coast and North County).

Secondary Objectives

The countywide LID Pilot program has an abundance of public visibility and education opportunities for the IRWM region overall. Although difficult to quantify, water quality benefits could be significant if LID programs take hold in the community and grow over time. Improvements to drinking water supplies and environmental instream benefits can be achieved as well.

(b) **Relate to WMS, RMS and Objectives**

SLO Recommended Project Elements are identified as follows:

DWR State Objectives	DWR RMS	SLO WMS	SLO Recommended Project Elements	IRWM Objectives
• Improve Water Quality • Practice Resources Stewardship • Flood Management • Demand Reduction	• Pollution Prevention • Watershed Management • Flood Management • Urban Water Use Efficiency	• Environmental and Habitat Protection • NPS Pollution Control • Flood Management • Water Conservation • Economic Incentives	• Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams. • Provide cost-effective alternatives to private property owners in managing on-site sources of contamination. • Attenuate storm flows by increasing private property on-site retention and detention controls. • Provide public incentives to gain volunteer change in on-site water use and handling practices.	• Conservation and Water Use Efficiency • Reduce Contaminants • Promote Low Impact Development • Funding for Water Resources Management • Support Local Control • Promote Public Education

(c) **Technical Feasibility and Justification**

The LID Pilot program is a stormwater management strategy that emphasizes conservation and use of existing natural site features integrated with distributed, small-scale stormwater controls to more closely mimic natural hydrologic patterns in residential, commercial and industrial settings. It is relatively easy to use and implement, offering a low cost and immediate solution to water catchment. The project is about changing the current practices of landscape construction and handling of on-site stormwater to reduce releases of contaminants off-site and improve deep percolation of sudden storm events. This includes simple low-cost projects and programs to capture stormwater runoff and applying to on-site irrigation systems. Positive physical benefits will occur to downstream ecosystems and in-stream habitats through improved water quality and reduced sediment loads.

Given the "pilot program" classification, the intent is to provide economic incentives and education so the public makes the voluntary decision to make changes in their on-site handling of stormwater runoff and changes in irrigation practices. From the (currently uncertain) level of participation, studies are to be performed and reported as to the success in public participation and recommend practices which are found to be accepted over others.

True water quality and ecosystem benefits will not by quantifiable until the greater population of a single watershed converts to LID practices. It is the intent to monitor for hydrologic effectiveness by the property owners with reporting to the US-LTRCD. Hydraulic and pollutant load reductions models will eventually be developed based upon current area data as a baseline for change. Urban demand reduction will show up in water system reporting, but lumped together with other conservation programs over time. Qualitative discussion of benefits will likely occur in the interim years of the proposed 10-year monitoring period.

(d) **Benefit DACs**

The LID Pilot Program is focused in the North Coast and North County Sub-Regions and includes the 3 of the 4 DACs of the IRWM region. Emphasis will be in drought affected watersheds.

(e) **Environment Justice**

Program does not directly or indirectly impact or discriminate against low income communities. Given the proposed owner investment requirement with rebate upon inspection, the expected level of participation in low income communities will be lower than others.

(f) **Cost and Financing**

The cost of the initial education, audits and program management is estimated at $169,000 and will be funded through grant dollars with the matching requirements funded through in-kind services by the US-LTRCD. The expected implementation is 2 years with a 10-year monitoring period with no long-term O&M costs. An estimated 20 percent of the funding is available.

(g) **Feasibility through Economic Analysis**

Of the DWR methods for quantifying benefits, method Section D2 – Non-Monetized Benefits Analysis will likely be selected for the water quality benefits. The ability to assign benefits is tied to the ability to specifically measure the pollutant load reductions due to LID project implementation. However, given the larger uncontrolled watershed, of which the LID Pilot Project is only going to be a small portion, it is extremely difficult to ascertain true benefit on a watershed basis.

(h) **Project Readiness to Proceed**

The project's status as a non-structural program, will likely exempt it from permitting and CEQA review. Upon the receipt of funding, the project could proceed. LID programs have been utilized in other parts of the state and country and are program ready, permit enabled and have relatively low installation costs.

(i) **Strategic Implementation of the Plan and Project Merit**

The program is multi-objective and will focus its distribution throughout the North Coast and North County region fairly, as it will be a goal to have LID pilot installations in areas of peak visibility and widely distributed to create greater public awareness.

Many alternative projects involve water purveyor infrastructure that is needed but expensive. These are challenging to install and are considered "top down" approaches (government controlled) to managing water. LID is consumer driven, putting all citizens in a capacity to help with the problem of water catchment and management. These two approaches can be integrated to maximize participation and solutions to a common problem.

(j) **Climate Change Effects**

Reducing traditional methods of public water systems (supplies that need to be pumped and piped at high pressures), the project reduces GHG emissions by reducing the need for public water supplies with very little energy consumption.

(k) **Reducing GHG compared to Project Alternatives**

The more typical government controlled "top down" alternative approaches are associated with higher energy costs and construction impacts, both having a greater GHG impact.

(l) **Project Sponsor to adopt IRWM Plan**

Yes.

(m) **Reduce Dependence on Delta Supplies**

Reduced water demand in the IRWM region reduces reliance on SWP supplies.

2.5.2 ***Impact and Benefit***

Discuss:

(n) **Potential Impacts and Benefits of Project Implementation**

No impacts are anticipated to occur as a result of this project. Project has the potential to save drainage pumping costs/energy, if pumping is necessary to convey drainage to major stream or river during flood events. Also has potential to reduce groundwater pumping costs by incrementally increasing the groundwater elevations. Both are small and difficult to quantify to any degree of accuracy.

(o) **When a more Detailed Project-Specific Impact and Benefit Analysis will Occur**

Not applicable due to the program nature of the project.

2.5.3 ***Plan Performance and Monitoring***

(p) **What is Proposed Methods of Monitoring Project Performance**

See Technical Feasibility and Justification above.

2.5.4 *Financing Strategies*

What is the plan for implementation and financing of project and programs including:

(q) **Known and Possible Funding Sources**

Participating agencies that can provide monetary or in-kind contributions to the program include California Conservation Corps, Natural Resources Conservation Service, Cities and Community Services Districts wherever possible.

(r) **Funding Mechanisms, Including Water Rates, etc.**

No long-term funding is required other than annual reporting through in-kind service of the US-LTRCD and use of their annual budgetary process.

(s) **How O&M Costs for Projects will be Covered**

Not applicable as there are no O&M costs.

Project Code	Project Title	Project Cost	Question 1: Funding Source and % of Total Cost	Question 2: Certainty/Longevity	Question 3: O&M Finance Source
MLTP_WMT2	LID Pilot Program	<$250K	California Conservation Corps, Natural Resources Conservation Service, and Cities and Community Services Districts who participate will provide monetary or in-kind contributions	In-kind labor from sponsoring agencies and reporting costs are fully funded	Not Required
			Grant Monies (Prop 84, 3rd Round; USEPA Watershed Grant Program)	None	

2.5.5 *Climate Change*

(t) **Process that Considers GHG Emissions when Choosing between Project Alternatives**

As a program level project with no large structural component, no GHG emissions alternatives analysis is required.

Project 3. North County Fertilizer Regions_ Precision Agriculture

3.1 Project Number: NCNT_ECO1

3.2 Project Location: North County

3.3 Project Sponsor: US-LTRCD

Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)

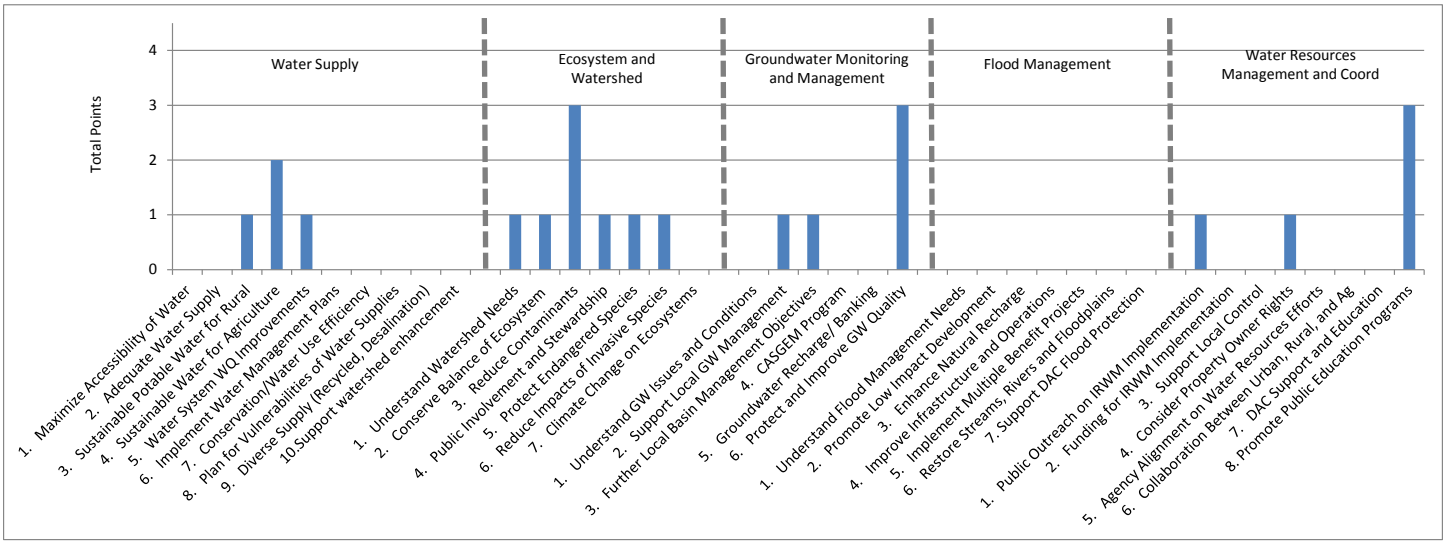
3.4 Project Summary:

This project produces **nutrient management recommendations** based on fertilizer regions in the North County. Regions are identified using soil characteristics, since they have the most effect on nutrient management. **Agricultural sites are chosen from applicants** in these regions and three different packages of **nutrient management BMPs and fertilizer programs** will be implemented at each of 5 locations. The **costs and benefits of the treatments will be compared and reported to interested parties**, and demonstrated to the public through RCD-developed workshops and tailgate style demonstrations. BMP's and nutrient management programs will be evaluated by measuring soil and water nutrient concentrations before and after treatments are implemented. Recommendations will be based on economic, agricultural and environmental factors. **Maps, recommendations and management plans will be created to be shared with the public.**

Available Source Documents: *County General Plan Conservation and Open Space Element; Agriculture Element*

3.5 IRWM Plan Section Information and Analysis:

3.5.1 *Project Solicitation and Ranking*



How does the project:

(a) **Contribute to Plan Objectives**

Project fully satisfies the following Objectives:

Ecosystem and Watershed Restoration – **Reduce Contaminants**

Improving the accuracy of fertilizer requirements reduces excess application of fertilizers, leading to an overall reduction from non-point source discharges throughout the North County Sub-Region. By providing only the amount of fertilizer the plants needs for maximum crop growth, there is less remaining fertilizer to move off-site either by means of overland runoff or by deep percolation from over irrigation and rainfall to groundwater supplies.

Groundwater Management – **Protect and Improve Groundwater Quality**

By reducing excessive application of fertilizer, this program reduces one of the largest contributors of non-point source pollution to groundwater and surface water.

Water Resources Management – **Promote Public Education**

The program will create public education forums, exhibits, and materials to bring awareness to the IRWM planning regions (i.e., North County). The US-LTRCD will hold workshops and demonstrations to showcase the BMPs and the results of the program. The US-LTRCD maintains a website that will be used to showcase the results of the project world-wide, and reports will be compiled for interested community members.

Secondary Objectives

The targeted fertilizer program has an abundance of public visibility and education opportunities for the IRWM region overall, but especially in the North County. Although difficult to quantify, water quality and economic benefits of reduced fertilizer costs could lead to improved fertilizer application in the larger agricultural community and grow over time. Other improvements include: improved drinking water quality, environmental instream benefits and healthier ecosystems, and reduction in invasive species reliant on excess nutrients in surface water.

(b) **Relate to WMS, RMS and Objectives**

SLO Recommended Project Elements are identified as follows:

DWR State Objectives	DWR RMS	SLO WMS	SLO Recommended Project Elements	IRWM Objectives
• Improve Water Quality	• Pollution Prevention	• Environmental and Habitat Protection • NPS Pollution Control	• Provide cost-effective alternatives to private property owners in managing on-site sources of contamination. • Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater.	• Reduce Contaminants • Promote Public Education

(c) **Technical Feasibility and Justification**

Agricultural Growers will be the main beneficiaries of this project. This project provides another set of data for growers in the beginning phase of developing precision agriculture systems on their farms. The goal of these systems is to maximize productive yields per acre while reducing, to the maximum extent possible, negative effects on the environment. Implementation of these practices does not require large equipment costs to the farmer, and results are felt immediately serving as an economic incentive by reduced fertilizer bills.

While not targeted specifically, both public and private rural groundwater users benefit because the ultimate net effect of wide adoption of targeted fertilizer practices is an increase of surface and groundwater quality. Many municipalities, rural residential and agricultural operations depend on groundwater pumping to meet their drinking water needs. When these waters are polluted with nutrients, they have to be treated before they can be used. This expense can be reduced if precision nutrient management becomes more widespread.

As the leading conservation minded agency in the North County, it is the goal of the US-LTRCD to share data and technological advances with the members of the wider IRWM community. The on-going crisis in the Paso Robles Groundwater Basin requires protecting the available water resources, especially these resources impact economic pursuits in the farming industry. The US-LTRCD is to be used as a data repository and resource for those who want to know more information when making land resource management decisions. By leading efforts such as the Precision Fertilizer Program, the US-LTRCD becomes a partner with the agricultural community in merging their economic needs with environmental stewardship.

The main obstacle to implementation is the potential loss of crop productivity due to decreased fertilizer use. Fertilizer use has proven to be necessary to increase yields on the scale that the global population needs. Precision fertilization requires methods that deliver the precise amount of fertilizer, delivered to the correct place at the correct time to maximize plant uptake and reduce nutrient runoff and leaching.

Actions to monitor the benefit of the project implementation will include water quality from nearby streams and on-site soil sampling analysis, keeping track of each method of treatment separately in order to test their effects and quantify their benefits on water quality. The area of implementation and amounts of fertilizer reduction are believed to be significant enough to see a difference from baseline monitoring results taken prior to on-site program implementation. Nitrate will be the main nutrient analyzed, but other concentrations will also be recorded and distributed to supplement nutrient management plans that increase environmental stewardship efforts. Public awareness campaigns will spread the results of this project as growers face an increasing regulatory environment. Groundwater sampling for baseline levels of nitrates will be taken for purposes of potential program benefits to shallow drinking water supplies. Nutrient concentration analysis will take place before and after each growing season during the length of 10-year monitoring cycle of the project. Surface waters are more likely to show changes related to management practices as groundwater benefits require significant time to see on a basin level.

(d) **Benefit DACs**

Project does not benefit or impact DACs.

(e) **Environment Justice**

Program does not directly or indirectly impact or discriminate against low income communities.

(f) **Cost and Financing**

The proposed project actions are design, financial support and application processes for collaborating growers, demonstration site placement and installation of BMPs, analysis of data, report compilation and presentation through workshops. The cost of the program is estimated at $160,000 and will be funded through grant dollars with the matching requirements funded through in-kind services by the US-LTRCD. The expected implementation is 2 years with a 10-year monitoring period with no long-term O&M costs. An estimated 20 percent of the funding is available.

(g) **Feasibility through Economic Analysis**

The project has an indirect cost of reducing the cost to produce fertilizer by reducing the demand for fertilizers. There will also be a benefit in reduced transportation costs to deliver, and reduced fuel to power tractors used to apply fertilizers. Of the DWR methods for quantifying benefits, method Section D1 – Cost Effective Benefits Analysis will likely be selected for the water quality and on-farm benefits. The ability to assign benefits is tied to the ability to specifically measure the pollutant load reductions due to BMP implementation. The size of area anticipated for BMP implementation should be large enough to see quantifiable differences local runoff, soil conditions, and nearby shallow groundwater wells.

(h) **Project Readiness to Proceed**

The project's status as a non-structural program, will likely exempt it from permitting and CEQA review. Upon the receipt of funding, the project could proceed.

(i) **Strategic Implementation of the Plan and Project Merit**

This project will identify a nutrient management suite of BMPs that has the best combination of economic and environmental benefits for the North County crop growing regions. Precision nutrient management aims to minimize wasteful fertilizer practices such as over-application and incorrect placement and timing of fertilizer applications. Implementation results in a savings due to reduced fertilizer use. Multi-regional benefits will occur along the Salinas River, which has been monitored for years with many communities that rely on it for alluvial drinking water, and its mouth at the Monterey Bay, where nutrient accumulations have been known to affect the ecosystem.

(j) **Climate Change Effects**

Reduced energy cost in the production, transportation and application benefits climate change.

(k) **Reducing GHG compared to Project Alternative**

No project alternatives are included.

(l) **Project Sponsor to adopt IRWM Plan**

Yes

(m) **Reduce Dependence on Delta Supplies**

Not applicable

3.5.2 ***Impact and Benefit***

Discuss:

(n) **Potential Impacts and Benefits of Project Implementation**

No impacts are anticipated. Project has the potential to benefit water quality leading to potential decreases in treatment costs downstream for potable supplies. Given the uncertainty of location and the small amount of change, the change in treatment operations cannot be quantified.

(o) **When a more Detailed Project-Specific Impact and Benefit Analysis will Occur**

Not applicable due to the program nature of the project.

3.5.3 ***Plan Performance and Monitoring***

(p) **What is Proposed Methods of Monitoring Project Performance**

See Technical Feasibility above.

3.5.4 ***Financing Strategies***

What is planned for implementation and financing of the project:

(q) **Known and Possible Funding Sources**

Grant monies are being sought with the potential for in-kind services provided by the US-LTRCD to meet matching requirements.

(r) **Funding Mechanisms, Including Water Rates, etc.**

Grant funding programs.

(s) **How O&M Costs for Projects will be Covered**

No long-term O&M costs are anticipated as part of this program.

Project Code	Project Title	Project Cost	Question 1: Funding Source and % of Total Cost	Question 2: Certainty/Longevity	Question 3: O&M Finance Source
NCNT_ECO1	North County Fertilizer Regions_ Precision Agriculture	<$250K	Local Contributions through Donations and In-Kind Services (US-LTRCD)	In-kind labor from sponsoring agencies and reporting costs are fully funded	Not Required
			Grant Monies (Prop 84, 3rd Round; USEPA Watershed Grant Program)	None	

3.5.5 *Climate Change*

(t) **Process that Considers GHG Emissions when Choosing between Project Alternatives**

Not applicable for the program.

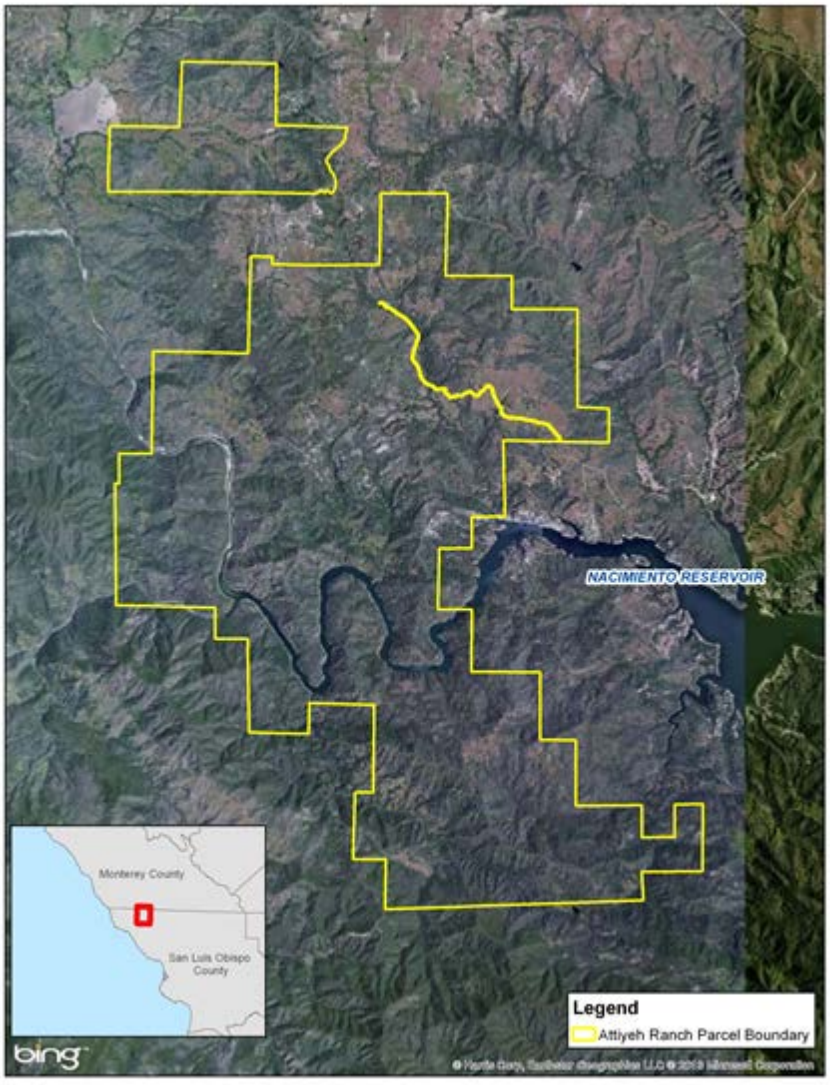
Project 4. Attiyeh Ranch Conservation Easement

4.1 Project Number: NCNT_ECO2

4.2 Project Location: North County

4.3 Project Sponsor: Land Conservancy

Land Conservancy of San Luis Obispo County



Source: 2013 SLO Round 2 Grant Application

4.4 Project Summary:

The project involves the acquisition of a conservation easement to protect the land in perpetuity.

The draft Attiyeh Ranch Conservation Easement was reviewed by the landowner with no substantive changes. The final easement language is currently being developed and contains the following prohibited land uses to ensure the land is managed consistent with the project goals:

- Subdivision
- Construction of houses or other structures
- Waste dumps
- Grading and soil dumping
- Surface and/or subsurface mineral development
- Installation of new above-ground utility systems, including, without limitation, water, sewer, power, fuel, and communication lines and related activities and equipment, except for systems servicing permitted agricultural uses on the ranch and existing structures
- Cutting or removal of native trees, shrubs, or other vegetation, except for continued reasonable land management purposes, and as may be necessary for elimination of diseased growth, fire protection, and similar protective measures, and to protect human safety

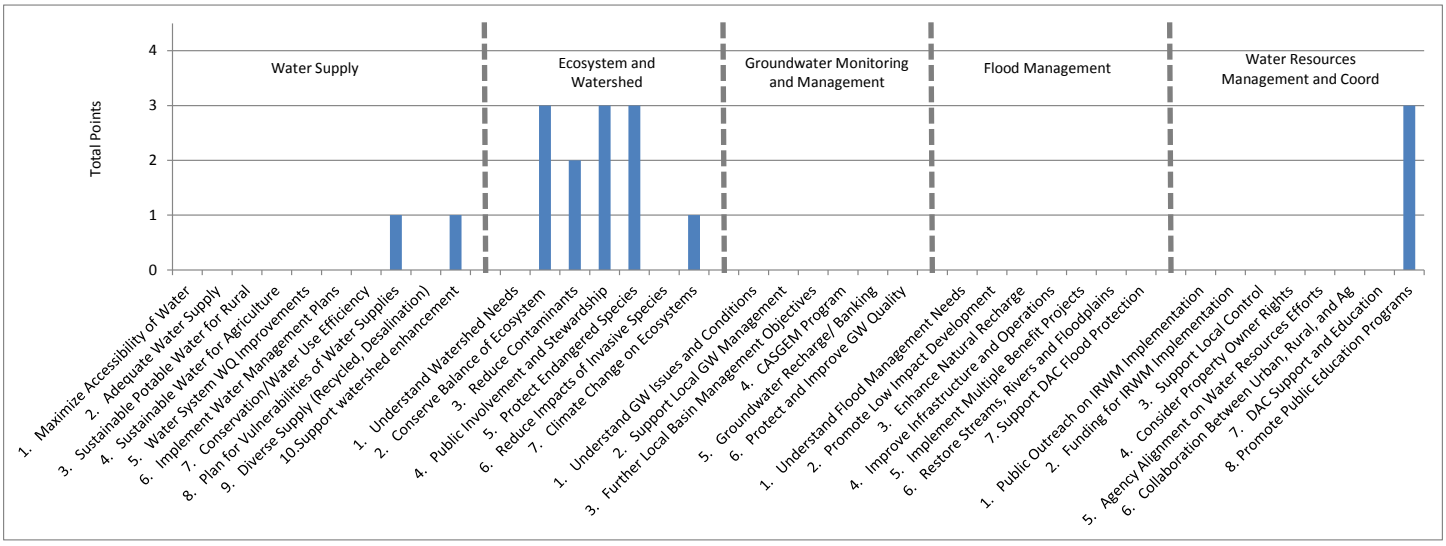
Just prior to the recordation of the easement, an updated Preliminary Title Report and Appraisal will be completed to ensure the title is clear of any potentially conflicting encumbrances and that the appraisal value is accurate. Additionally, The Land Conservancy **collects baseline documentation information** which describes the condition of the ranch at the time the easement is recorded. These data, along with baseline photographs, will be **compiled in a report** signed by both The Land Conservancy and the landowner before closing. All matching funds must be confirmed and funds sent to the project's escrow account. Once all funds have reached escrow, the conservation easement will be signed, notarized, and recorded.

To ensure all easement conditions are met and the project benefits are delivered, The Land Conservancy has adopted a **Conservation Easement Monitoring Policy and Procedure** that clearly establishes the methods to monitor all conservation easement properties it holds. Any changes to the policy must be reviewed and approved by The Land Conservancy's Board of Trustees. The conservation easement monitoring procedure can be amended by The Land Conservancy staff, as needed. At a minimum, all conservation easements are monitored once a year by two staff members of The Land Conservancy. Any actual or threatened violations to a conservation easement are documented and the landowner is notified immediately to resolve issues as soon as possible. The Land Conservancy maintains a conservation easement stewardship and defense fund as well as conservation easement insurance to help safe guard against violations and defend the terms of the easement in the event of an enforcement action.

Available Source Documents:

4.5 IRWM Plan Section Information and Analysis:

4.5.1 *Project Solicitation and Ranking*



How does the project:

(a) **Contribute to Plan Objectives**

Project satisfies the following Objectives:

Ecosystem and Watershed Restoration **– Conserve Balance of Ecosystem**

As a conservation easement, the values of the overlying ecosystem and overall watershed are protected in a natural state in perpetuity. As such, watershed flows contributing to downstream river are anticipated to benefit from reduced sediments and improved water quality.

Public Involvement and Stewardship

Allowing limited public access and a focus on public education, provides the public and local communities with the sense of ownership and pride in having pristine natural resources.

Protect Endangered Species

Anticipated beneficial activities create visibility in the importance of preservation of natural areas still home to many endangered flora and fauna species.

Water Resources Management **– Promote Public Education**

The Land Conservancy offers public education materials; a website (http://www.lcslo.org/); available public access; docent led hiking highlighting protected flora and fauna, and signage along roadways and trails.

Secondary Objectives

Because of the size of the conservation easement, large watershed management controls can take place

through maintaining the easement in a natural state allowing existing ranching and agricultural activities to take place in accordance with the conditions of the easement; not anticipated to go beyond historical levels. Watershed management is not considered a primary objective by definition where the applicability of watershed management is for more urbanized and heavy agricultural areas. By eliminating the potential for urban growth within the easement, however, the associated increases in water demand and degradation of surface water quality can be said to benefit.

(b) **Relate to WMS, RMS and Objectives**

SLO Recommended Project Elements are identified as follows:

DWR State Objectives	DWR RMS	SLO WMS	SLO Recommended Project Elements	IRWM Objectives
• Practice Resources Stewardship • Improve Water Quality	• Ecosystem Restoration • Pollution Prevention	• Environmental and Habitat Protection • NPS Pollution Control	• Create and preserve natural ecosystems and protect endangered flora and fauna through Land Stewardship and Conservation Easement programs. • Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater.	• Conserve Balance of Ecosystem • Public Involvement and Stewardship • Protect Endangered Species • Promote Public Education

(c) **Technical Feasibility and Justification**

The purpose of the Attiyeh Ranch conservation easement is to preserve the Attiyeh Ranch and prevent the conversion of what is now rangeland, grazing land and grassland to nonagricultural uses; to protect the long-term sustainability of livestock grazing including some of the benefits that occur from livestock grazing; to preserve the natural ecosystem that exists today for environmental and social benefits; and to ensure continued wildlife, water quality, watershed and open-space benefits from livestock grazing on the 8,300 acre ranch. It is further the purpose of the conservation easement to ensure the Attiyeh Ranch will be retained forever in its agricultural and natural condition and to prevent uses within the ranch that will significantly impair or interfere with the open space, agricultural, and natural habitat values of the ranch. The conservation easement will confine the use of the ranch to such activities, including, without limitation, those involving livestock grazing, habitat protection, education and other compatible uses.

As a passive ecosystem preservation project, the process for implementation of the project goals differs significantly from other more active urban water resource management projects such as drainage and water supply infrastructure projects. For the Attiyeh Project, the standard tasks associated with constructing a project (e.g., construction management, bid proposals, and scheduling) are not well-suited to the types of activities needed for implementation; however, it is still the intent that the project adheres to the organization of the active project model for ease in locating and comparing information between projects.

The project involves the acquisition of a conservation easement to protect the land in perpetuity. The draft Attiyeh Ranch Conservation Easement was reviewed by the landowner with no substantive changes. The final easement language is currently being developed and contains prohibited land uses to ensure the land is

managed consistent with the project goals. The anticipated cost of the easement is $8.4 Million including an estimated one-time labor cost of $112,115 to execute the easement, improve signage, fix fencing and create trail systems. In-kind services will also be provided by volunteers on annual basis for docent led hikes and monitoring.

(d) **Benefit DACs**

No direct benefit to DACs will occur.

(e) **Environment Justice**

The conservation easement will not impact low income areas.

(f) **Cost and Financing**

Partial funding is anticipated to come from landowner contributions, California Prop 84 or other state Grant funding, Wildlife Conservation Board, Department of Defense, Wyss Foundation, and The Nature Conservancy.

The source of the Non-State share (Funding Match) is secured by landowner contribution upon the recordation of the conservation easement as codified in Land Conservancy of San Luis Obispo County memo dated February 14, 2013. The sources of the Other State Fund share are being developed with the Department of Water Resources, Department of Fish and Wildlife, Department of Defense, The Wyss Foundation, and The Nature Conservancy.

(g) **Feasibility through Economic Analysis**

Of the DWR methods for quantifying benefits, method Section D3 – Monetized Benefits Analysis has been selected for Environmental and Habitat Protection and NPS Pollution Control benefits based on the grant amount and the ability to monetize the benefits in terms of an annual dollar value for each year of the project's operation. In addition, Section D2– Non-Monetized Benefits Analysis has also been selected for the Community/Social Benefits based on making private lands open to the public.

(h) **Project Readiness to Proceed**

The conservation easement requirements have been negotiated and the easement papers are ready for signature.

(i) **Strategic Implementation of the Plan and Project Merit**

This project serves as the example of large-scale change through ecosystem preservation and land stewardship for purposes of maintaining the natural habitat and protecting endangered species of flora and fauna.

(j) **Climate Change Effects**

As a project that protects the trees and native vegetation, the project is considered to be beneficial in reducing GHG. Climate change could have negative effects on the conservation easement ecosystem resulting from both timing and intensity in rainfall.

(k) **Reducing GHG compared to Project Alternatives**

Not applicable, there are no project alternatives.

(l) **Project Sponsor to adopt IRWM Plan**

Yes.

(m) **Reduce Dependence on Delta Supplies**

Not applicable, no SWP water is affected by this project.

4.5.2 *Impact and Benefit*

Discuss:

(n) **Potential Impacts and Benefits of Project Implementation**

Project has the potential to benefit water quality leading to potential decreases in treatment costs downstream for potable supplies. Given uncertainty of location of WTPs, if any, and the small amount of change, the change in treatment operations cannot be quantified. Project also has some flood attenuation benefits which are also unquantifiable. Water savings can be avoided by assuming that the easement will prevent development over the conserved area. The savings of 13,280 AFY of groundwater pumping assumes a low 1.6 AF per acre per year to account for existing water uses and future conservation if development were to occur.

(o) **When a more Detailed Project-Specific Impact and Benefit Analysis will Occur**

A detailed impact and benefits analysis exists from the 2013 Prop 84 Grant submittal not awarded.

4.5.3 *Plan Performance and Monitoring*

(p) **What is Proposed Methods of Monitoring Project Performance**

Monitoring will take place in perpetuity to ensure lands are protected in accordance with the conditions of the conservation easement.

4.5.4 *Financing Strategies*

What is the plan for implementation and financing of project and programs including:

(q) **Known and Possible Funding Sources**

Current funding is as follows:

- Landowner contributions ($2,121,785)
- Wildlife Conservation Board ($2,100,000)
- Other funds to be secured ($4,268,555)

(r) **Funding Mechanisms, Including Water Rates, etc.**

Proposed funding expected to come from both private and public grant programs. No long term fee or rate program is anticipated.

(s) **How O&M Costs for Projects will be Covered**

A nominal annual cost is anticipated for road and trail maintenance, and is likely to be paid through volunteer resources and monies provided to the Land Conservancy through donation or other similar programs.

Project Code	Project Title	Project Cost	Question 1: Funding Source and % of Total Cost	Question 2: Certainty/Longevity	Question 3: O&M Finance Source
NCNT_ECO2	Attiyeh Ranch Conservation Easement	>$5M	Landowner contributions ($2,121,785) Wildlife Conservation Board ($2,100,000)	Contributions are Definite	Land Conservancy of San Luis Obispo County will maintain easement in perpetuity using annual operating funds received as donations and …
			Grant Monies or Other Monies to be Secured	None	

4.5.5 *Climate Change*

(t) **Process that Considers GHG Emissions when Choosing between Project Alternatives**

Not applicable for this project.

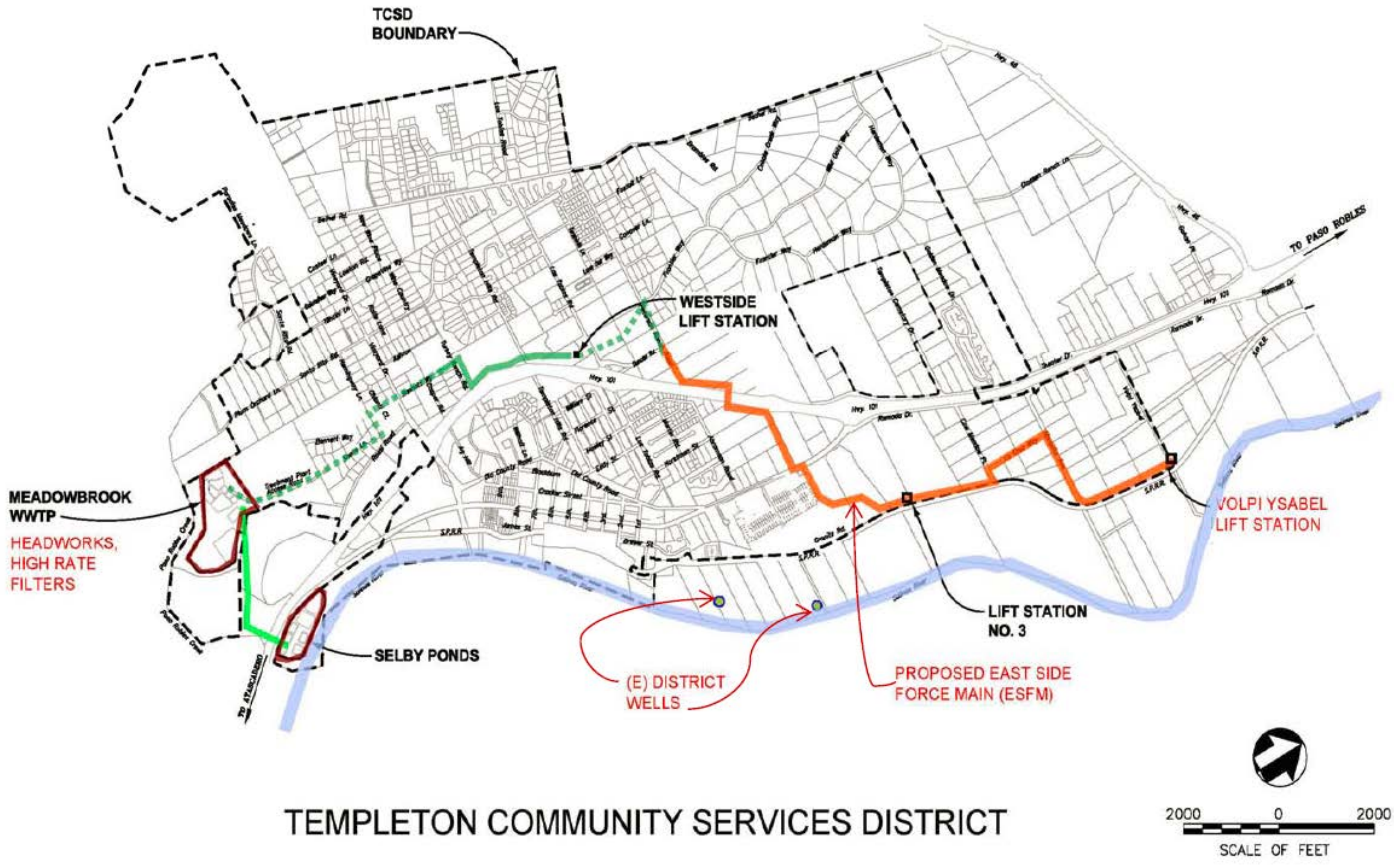
Project 5. Upper Salinas River Basin Water Conservation/Conjunctive Use Project

5.1 Project Number: NCNT_GWM1

5.2 Project Location: North County

5.3 Project Sponsor: TCSD

Templeton CSD



UPPER SALINAS RIVER BASIN WATER CONSERVATION/CONJUNCTIVE USE PROJECT

Source: Templeton CSD

5.4 Project Summary:

The Templeton Community Services District (TCSD) currently utilizes two wastewater treatment and disposal options. The proposed Upper Salinas River Basin Water Conservation/Conjunctive Use Project proposes to

utilize the entire wastewater generated by the TCSD to **augment local water supplies** for beneficial use within the community. The project has a number of distinct components that make up the entire project. For ease of explanation, they are broken down below as follows:

1. The **East Side Force Main and Lift Station Project** (ESFM Project) stops all conveyance by TCSD of any wastewater to the Paso Robles WWTP where the treated wastewater is currently discharged to the Salinas River.

2. **Pipeline construction along a 2.4 mile** corridor proposes to re-route the treatment and disposal location of approximately 220,000 gallons per day ("gpd") of wastewater on average, previously conveyed to the Paso Robles WWTP, to the Meadowbrook wastewater treatment plant (WWTP) and Selby Percolation Pond Facility (Selby Ponds).

3. Treated wastewater conveyed to the Selby Ponds is percolated into the Salinas River underflow (highly transmissive soils underlying the Salinas River laid down over hundreds of years), and retrieved downstream by shallow TCSD wells[2] where it becomes available for community use. Once the new lift stations and force mains are completed, and the Meadowbrook WWTP is operating under optimum conditions, the goal is to **ensure that the highest quality water is percolated into the underflow of the Salinas River**.

4. To **improve the water quality** effluent further, high rate filtration, such as tertiary treatment will be added. This additional level of treatment will be required in the future based on the need to improve the percolation rates, **recycled water needs within the basin**, and to meet anticipated regulatory requirements. This additional treatment would also improve the percolation rate of the treated wastewater at the Selby ponds. This step will position the TCSD for future compliance with Title 22 regulations and **provide the ability to provide recycled to customers for irrigation**.

5. While current and future flow estimates that include the proposed return wastewater flows are considered in the design of the West Side Lift Station, actual facility operations and equipment will need to be upgraded to meet the returned wastewater flows. T**he West Side Lift station, as well as the collection system downstream of the discharge point (Peterson Ranch Rd.) of the Project, will be upgraded to accommodate current and the increased future wastewater flows**.

6. The Meadowbrook WWTP currently utilizes a manual bar screen to prevent large debris from entering the AIPS pond system. At the current flows, the bar screens are generally cleaned once per day. If the screens are not cleaned frequently enough, or a surge of inorganic materials is sent to the wastewater plant, a dam may form on the screen, causing a backup into the headworks. This could cause an overflow, sending unscreened influent to the ponds. With the additional flows anticipated to reach the WWTP with the project, an increase in screening capacity will be required along with the necessity for an automated system. **An improvement in screening will improve the overall performance of the plant by preventing a larger percentage of inorganic debris from entering the**

[2] The water is retrieved via groundwater wells not under the influence of surface water. FUGRO evaluated the conveyance loss at 2%. Decision 1585 does not apply for use of treated wastewater under California Water Code section 1210. Any reduced discharge in the Salinas River as result of this project has been addressed under CEQA.

process and increasing employee safety. This component will ensure system reliability, regulatory compliance and assist in meeting water quality objectives. **Construction of a new Meadowbrook WWTP Headworks** is recommended as an integral component of the overall project.

Available Source Documents: *Templeton Community Plan*

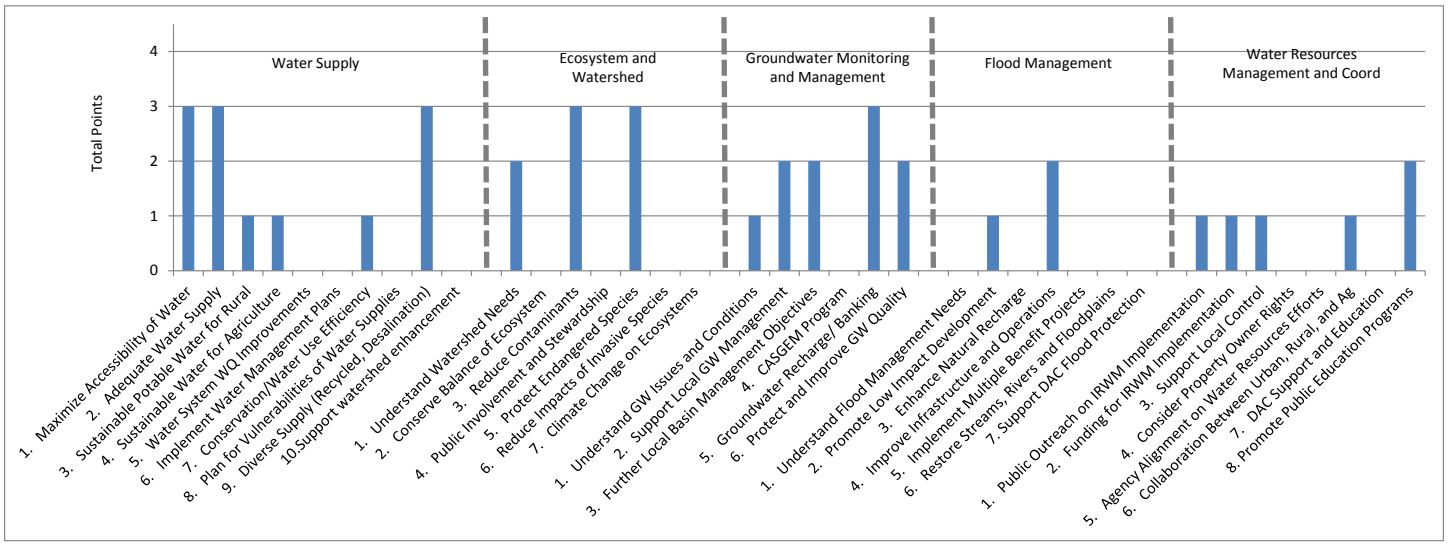
5.5 IRWM Plan Section Information and Analysis:

5.5.1 *Project Solicitation and Ranking*

How does the project:

(a) **Contribute to Plan Objectives**

Project satisfies the following Objectives:



Water Supply – **Maximize Accessibility of Water**

Project implementation results in higher beneficial use for treated wastewater. Conservation and conjunctive use will be achieved through improved and increased percolation of treated wastewater into the underflow of the Salinas River where it can be retrieved downstream, offsetting the need for new groundwater wells to meet supply demands and moving forward in ultimate recycled water use for outdoor irrigation. Actual use of recycled water is not an element of this project.

Adequate Water Supply

Project enhancement of increased discharge of an improved quality of treated wastewater being percolated into the underflow of the Salinas River will increase the availability of groundwater and surface water supplies to communities reliant on the groundwater basin and Salinas River for use as a water supply for urban, ag, and rural. As a supplemental water conservation and conjunctive use enhancement project, more water is maintained in-basin.

Diversify supply (Recycled Water)

Project is producing a large step toward ultimate use of treated wastewater as a source for outdoor irrigation in the Templeton Community.

Ecosystem – **Reduce Contaminants**

Project will reduce the treated effluent stream (point source of contaminants) from the Paso Robles WWTP to the Salinas River through creating an alternative method of treatment, increasing water quality, and disposal, through percolation to groundwater supplies.

Protect Endangered Species

Any improvement to water quality in the Salinas River has the potential to protect endangered species of flora and fauna downstream. The project will achieve zero discharge to fresh water streams. Loss of discharge flows directly into the Salinas River is expected to be made up from increased reservoir releases and increased growth in the City of Paso Robles.

Groundwater Management – **Groundwater Recharge/Banking**

The Project is a water conservation and conjunctive use solution, keeping groundwater pumped by the CSD in-basin for use as a supplemental source and as a source of supply for shallow underflow wells with the potential to offer water savings through future water recycling.

Secondary Objectives

Because the project is taking place at a local level with the CSD, the project is considered to have local control with implementation and financing also at the local level with state or federal assistance grants or loans. The merits of the project as an educational tool and use as a model for similar small groundwater communities have the potential for long term benefits on a regional scale. The vision of recycled water use and planning for this eventuality in the project design is a significant project feature.

(b) **Relate to WMS, RMS and Objectives**

SLO Recommended Project Elements are identified as follows:

DWR State Objectives	DWR RMS	SLO WMS	SLO Recommended Project Elements	IRWM Objectives
• Increase Water Supply • Improve Water Quality	• Conjunctive Management Pollution Prevention • Water Conservation	• Water and Wastewater Treatment • Water Supply Reliability • Groundwater Management	• Develop and improve water and wastewater treatment facilities to reduce point source discharges of contaminants to natural streams. • Develop and Improve methods of water reuse within a community. • Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies.	• Maximize accessibility of Water • Adequate Water Supply • Diversify Supply • Reduce Contaminants • Protect Endangered Species • Groundwater Recharge/Banking

(c) **Technical Feasibility and Justification**

The Templeton Community Services District (TCSD) currently utilizes two wastewater treatment and disposal options. Approximately 220,000 gpd are sent to the Paso Robles WWTP for treatment and disposal directly to the Salinas River, and the remainder of effluent (150,000 gpd) is treated by the TCSD Meadowbrook WWTP and discharged at the Selby Ponds where the treated wastewater percolates into the shallow aquifer system and the Salinas River underflow (highly transmissive soils underlying the Salinas River laid down over time). The TCSD already has the permitted capacity to treat 600,000 gpd of wastewater at its Meadowbrook WWTP and discharge the treated wastewater at the Selby Ponds, inclusive of the redirected 220,000 gpd, per existing WDR Order No. R3- 2007-0029. The proposed Upper Salinas River Basin Water Basin/Conjunctive Use Project proposes to utilize the entire wastewater generated by the TCSD to augment local water supplies for beneficial use within the community. The project has a number of distinct components that make up the entire project. For ease of explanation, they are broken down below as follows:

- East Side Force Main and Lift Station Project (ESFM Project):
- Cessation of conveyance by TCSD of any wastewater to the Paso Robles WWTP where the treated wastewater is discharged to the Salinas River;
- The Templeton Community Services District (TCSD) proposes to re-route the treatment and disposal location. Pipeline construction along a 2.4 mile corridor;
- Concurrently with the planning and development of the East Side Force Main and Lift Station Project (ESFM Project), the Meadowbrook WWTP is undergoing intensive study and evaluation to optimize the treatment and quality of the effluent. Once the new lift stations and force mains are completed, the operation of the Meadowbrook WWTP will be operating under optimum conditions. The goal is to ensure that the highest quality water is percolated into the Salinas River Underflow.
- Tertiary treatment at the WWTP will also be added to provide an additional level of treatment required to improve the percolation rates, meet future recycled water needs within the basin, and to meet anticipated regulatory requirements.
- While current and future flow estimates are considered in the design of the West Side Lift Station, actual facility operations and equipment are to be upgraded to meet the increase in wastewater flows. The West Side Lift station, as well as the collection system downstream of the discharge point (Peterson Ranch Rd.) of the Project, will be upgraded to accommodate current and planned future wastewater flows.
- The Meadowbrook WWTP currently utilizes a manual bar screen to prevent large debris from entering the AIPS pond system. An improvement in screening will improve the overall performance of the plant by preventing a larger percentage of inorganic debris from entering the process and increasing employee safety. This component will ensure system reliability, regulatory compliance and assist in meeting water quality objectives.

The Templeton Community Services District and the surrounding Atascadero Basin will be affected and benefit by the project because this project will increase the return flow of treated wastewater to percolate into the underflow of the Salinas River for subsequent retrieval of downstream wells. This alternate sustainable use will provide new water to supplement existing supplies and allow for better water management practices in the Atascadero Basin.

The TCSD currently provides water and wastewater service to customers within the Templeton service area

and to specific wastewater customers outside the service area with user agreements. The County of San Luis Obispo (SLO) determines land use zoning in the existing Land Use and Circulation Element and the Land Use Ordinance. Land use designations are used to project current and future water demands and wastewater flows in the TCSD. As the service provider for the Templeton Community, the TCSD must find sustainable water supplies to meet the projected demands required by SLO County land use regulations. The existing service area currently contains 76 percent of the total build out of residential units, and 23 percent of the total build out of non-residential square footage. Additional water supply is needed that can be attained through this project to assist the CSD in meeting these land use goals established by the County. This project will improve the sustainability of existing supplies for Templeton and its neighbors in the Atascadero Basin.

The major hurdles have been eliminated. The project has received approval of a wastewater change petition, State Water Resources Control Board Order No. WW-0065, and completed all required CEQA environmental review. The project funding needed for implementation is for 50% of the total project cost and the potential obstacle to project implementation is the need for supplemental funding. In order to make the project affordable for the community grants and low interest loans are being sought.

The total estimated cost is $10.4 Million with an estimated $500,000 per year in O&M costs. Sources of funding will include grants, loans, existing reserves and TCSD water and/or wastewater rates.

(d) **Benefit DACs**

The community of Templeton is not a DAC.

(e) **Environment Justice**

No low income areas are to be impacted by this project either through the construction phase or the operational phase.

(f) **Cost and Financing**

Of the project's $10.4 Million cost, TCSD is seeking all state and federal grant and special loan programs. The TCSD considered several methods of funding. The District looked at revenue bonds, loans from private sources, and federal and state loans. Because the District is too small and without a credit rating, it is difficult to obtain self-financing from these sources.

(g) **Feasibility through Economic Analysis**

Of the DWR methods for quantifying benefits, method Section D3 – Monetized Benefits Analysis has been selected based on the potential grant amount and the ability to monetize the benefits in terms of an annual dollar value for each year of the project's operation. TCSD benefits are to be expressed as the cost of water saved by percolating treated wastewater into the underflow of the Salinas River where it becomes available for retrieval by downstream wells, saving the cost of drilling new wells and/or purchasing additional water supply. Additional benefits include any decrease in cost for wastewater treatment at existing Paso Robles WWTP. Benefits associated with Water Quality improvements to the Salinas River are difficult to monetize.

Upon notice of available funding opportunities, a full cost benefit analysis will be performed.

(h) **Project Readiness to Proceed**

The Project as described above is already underway as of 2012 with a Mitigated Negative Declaration for

construction of the pipeline. The project has already been publically vetted and substantial planning, environmental, feasibility, and design work has already been conducted. This project is ready to move forward pending the ability to cost effectively finance the project. The small size of the Templeton community requires additional financial assistance to make this a successful project.

(i) **Strategic Implementation of the Plan and Project Merit**

This project provides for the opportunity to educate the public on the water system within the TCSD and the surrounding areas and the importance of protecting the local ecosystem and public lands, given the opportunity to return water resources back into the local ecosystem. Colorful graphics and public outreach will illustrate the water cycle and how it begins with TCSD wells, goes out to serve TCSD customers, and is sent to the wastewater treatment plant, after which the recycled water is returned back into the environment via the pipeline and percolation basin.

(j) **Climate Change Effects**

This project is not anticipated to have Climate Change Effects. Energy costs will be kept low by optimizing the efficiency of the passive wastewater treatment system and using variable frequency drive pumps and other equipment that has improved energy efficiency ratings. The pump station will produce an estimated ___ of GHG emissions off-set by energy efficiency measures taken in other elements of the system.

(k) **Reducing GHG compared to Project Alternatives**

The no project alternative, staying at Paso Robles WWTP with expansion improvements, will likely have higher GHG emissions than the preferred project alternative.

(l) **Project Sponsor to adopt IRWM Plan**

Yes.

(m) **Reduce Dependence on Delta Supplies**

Not Applicable. No SWP is used by the TCSD

5.5.2 ***Impact and Benefit***

Discuss:

(n) **Potential Impacts and Benefits of Project Implementation**

The Project will have a decrease in the Paso WWTP energy costs, but results in an increase in energy use for additional wastewater treatment at Meadowbrook WWTP, conveyance pumping energy use, and recovery well energy use. The value of water used by the project is for well pumping only since treatment and conveyance are assumed to be a net zero energy cost.

The project does reduce summer flows in the Salinas River by reducing the Paso Robles WWTP discharge. This, however, was environmentally reviewed; and no significant adverse impacts were identified. TCSD sought and obtained approval from the State Water Resources Control Board for the change. The Contract between the TCSD and Paso Robles provides that the TCSD retains ownership of the wastewater; and TCSD claims rights to their wastewater pursuant to California Water Code section 1210 et seq.

(o) **When a more Detailed Project-Specific Impact and Benefit Analysis will Occur**

Project specific impacts analysis has already been performed with CEQA compliance and certification of a Mitigated Negative Declaration. Additional Impact and Benefit analysis will be performed as part of any grant funding requirement.

5.5.3 *Plan Performance and Monitoring*

(p) **What is Proposed Methods of Monitoring Project Performance**

Physical benefits will be quantified and a monitoring program will be developed to ascertain benefits of the project over a 10 year time span.

5.5.4 *Financing Strategies*

What is the plan for implementation and financing of project and programs, such as:

(q) **Known and Possible Funding Sources**

The TCSD considered several methods of funding. The TCSD looked at revenue bonds, loans from private sources, and federal and state loans. Because the TCSD is too small and without a credit rating, it is difficult to obtain funds from these sources. The TCSD will self-fund a significant portion of the project including environmental studies, land surveys, geotechnical and hydrogeologic studies, feasibility studies, engineering design and construction plans and specifications. If the grant is not obtained, other sources of funding will continue to be sought.

(r) **Funding Mechanisms, Including Wastewater Rates, etc.**

TCSD wastewater rates and fees will be used for long term operations and maintenance. Project construction costs are estimated as follows:

- Approximately 45 percent of the project funding is coming from Templeton CSD's proposed revenues provided by rate increases as per Wastewater Rate Update Study, by Perry Louck dated July 27, 2013, and have been adjusted to accommodate this level of funding.
- Approximately 10 percent of the project funding is coming from Templeton CSD's existing rates and revenues.
- The remaining amount of 45 percent is being sought through grant funding programs.

(s) **How O&M Costs for Projects Will Be Covered**

O&M will be funded through wastewater rates paid by existing and future customers.

Project Code	Project Title	Project Cost	Question 1: Funding Source and % of Total Cost	Question 2: Certainty/Longevity	Question 3: O&M Finance Source
NCNT_GWM1	Upper Salinas River Basin Water Conservation/Conjuntive Use Project	>$5M	Project construction costs are estimated as follows: • Approximately 45 percent of the project funding is coming from Templeton CSD's proposed revenues provided by rate increases as per Wastewater Rate Update Study, by Perry Louck dated July 27, 2013, and have been adjusted to accommodate this level of funding. • Approximately 10 percent of the project funding is coming from	Contributions are Definite	Templeton CSD can support project operations, maintenance, and replacement costs in perpetuity

			Templeton CSD's existing rates and revenues.		
			Grant Monies (Prop 84, 3rd Round; Water Recycling Grants; WaterSMART Program; Construction Funding Program, if qualifies),	None	

5.5.5 *Climate Change*

(t) **Process that Considers GHG Emissions when Choosing between Project Alternatives**

Not applicable. Project is already permitted and beyond the alternatives analysis phase. No evidence of GHG emission analysis is available.

Project 6. Community Based Social Marketing (CBSM)

6.1 Project Number: NCNT_WMT1

6.2 Project Location: North County

6.3 Project Sponsor: US-LTRCD

Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)

6.4 Project Summary:

Severe water supply shortages and TMDL listings show that residents in the Paso Robles Groundwater Basin require urgent outreach to bring an understanding of how residents can participate in creating solution-oriented behavior changes for **water conservation** and **basin sustainability**.

The US-LTRCD plans to **implement a community-based social marketing campaign** (CBSM) to address **water quality as well as quantity**. This pragmatic approach involves an **interactive program** identifying the barriers to a behavior that is debilitating to the Paso Robles Basin, developing dynamic and synergistic programs (and/or existing programs) to overcome these barriers, implementing an **interactive program of education and outreach** across the communities within the basin area and then **evaluating the effectiveness of the program by tracking and establishing if behavior changes** have occurred. The more direct involvement with the communities in the Paso Robles Basin area, the more we will foster more sustainable behavior. By developing and implementing this program, individuals, businesses and the agricultural community will be **educated on the cause/effect relationship** with actions within the homes and within business and farm practices that harm and deplete the area's water supply. This education will be paired with practical ways on how these behaviors can be modified to **directly support the mission of reducing greenhouse gas emissions, water conservation and preservation while positively impacting climate change**.

Available Source Documents: *County General Plan Conservation and Open Space Element; Agriculture Element*

6.5 IRWM Plan Section Information and Analysis:

6.5.1 *Project Solicitation and Ranking*

How does the project:

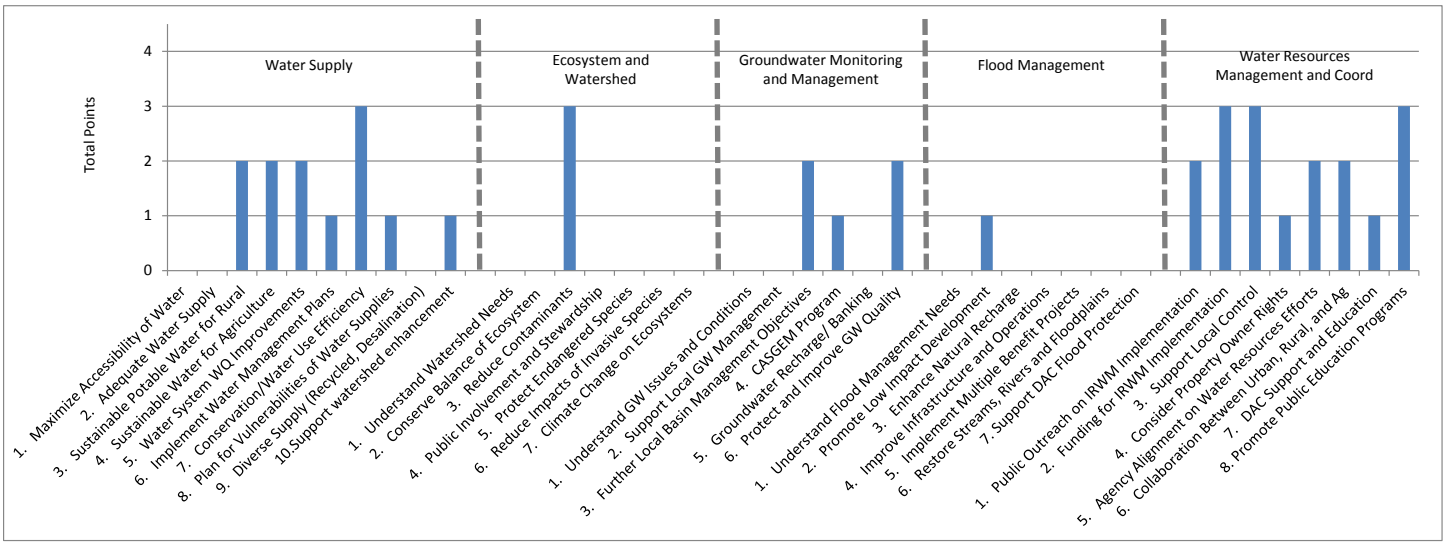
(a) **Contribute to Plan Objectives**

Project fully satisfies the following Objectives: [Carolyn - when set side by side with a structural project, this project is very small and does not guarantee success in meeting the Objectives; however, the merits of the program are of sufficient value to include the Objectives which apply. If phased, this program could satisfy additional objectives in the future.]

Water Supply – **Conservation/ Water Use Efficiency**

While limited in scope and depth of penetration through non-structural methods, the CBSM targets a large

interested audience through education and outreach on ways to improve water conservation and efficiency in how water for the urban, ag, and rural sectors of the Paso Basin.



Ecosystem – **Reduce Contaminants**

Using education as the primary tool, the CBSM seeks to change people's habits and ways of doing business to become more eco and water resources friendly. Meeting the Reduce Contaminants Objective typically requires some sort of structural change to make a difference in reducing contaminants; however, the anticipated widespread education and outreach is assumed to make an appreciable reduction in water pollutants.

Water Resources Management – **Funding for IRWM Implementation**

The project scale, cost and expected benefits are well balanced to succeed in achieving outside funding on behalf of landowners in the US-LTRCD.

Support Local Control

The program targets entire water sectors to assist them in their stewardship of constrained water resources in the Paso Basin. All efforts and decisions will take place at the local level with county-wide visibility.

Promote Public Education

The program will create public education forums, exhibits, and materials to bring awareness to other IRWM planning regions (i.e., North Coast and North County).

Secondary Objectives

The CBSM program has an abundance of public visibility and education opportunities for the IRWM region overall. Although difficult to quantify, water quality benefits could be significant if programs take hold in the community and grow over time. Improvements to drinking water supplies and environmental instream benefits can be achieved as well.

(b) **Relate to WMS, RMS and Objectives**

SLO Recommended Project Elements are identified as follows:

DWR State Objectives	DWR RMS	SLO WMS	SLO Recommended Project Elements	IRWM Objectives
• Improve Water Quality • Practice Resources Stewardship • Demand Reduction	• Pollution Prevention • Watershed Management • Urban Water Use Efficiency	• Environmental and Habitat Protection • NPS Pollution Control • Water Conservation • Economic Incentives	• Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater. • Provide cost-effective alternatives to private property owners in managing on-site sources of contamination. • Provide public incentives to gain volunteer change in on-site water use and handling practices.	• Conservation and Water Use Efficiency • Reduce Contaminants • Funding for IRWM Implementation • Support Local Control • Promote Public Education

(c) **Technical Feasibility and Justification**

Water is a finite resource and many regions of the County are experiencing diminishing water supplies due to increasing development and prolonged drought conditions. Most specifically, severe water supply shortages and TMDL listings show that residents in the Paso Robles Groundwater Basin require urgent outreach to bring an understanding of how residents can participate in creating solution-oriented behavior changes for water conservation and basin preservation. The success of community-based social marketing campaign (CBSM) is to identify and understand the barriers to develop and implement projects and programs. This step is critical in understanding and addressing the behaviors that negatively impacts the Paso Robles Groundwater Basin.

The CBSM specifically addresses water quality issues and provides strategies to reducing pollution sources as applicable. CBSM fosters collaborative efforts between community residents by engaging agricultural, residential and business interests and provides a solution based tool kit for both individual and combined efforts.

US-LTRCD will be partnering with other agencies to maximize/share resources and help reduce overall costs, plus reach out to companies and/or other organizations to help financially support the CBSM program. However, additional funding is necessary to provide consistency and strength in project implementation. The expected start-up cost is estimated to be $34,400 with an additional labor cost over 1-2 years of $137,700.

(d) **Benefit DACs**

Not applicable.

(e) **Environment Justice**

No low income communities will be impacted by this program.

(f) **Cost and Financing**

$34,400 in capital costs

$137,700 in labor costs over 1-2 years.

(g) **Feasibility through Economic Analysis**

A cost effectiveness economic analysis has not been completed for this project. The project has an indirect cost of reducing the cost to pump and treat water. Of the DWR methods for quantifying benefits, method Section D1 – Cost Effective Benefits Analysis will likely be selected to evaluate if the program is being implemented at the least possible cost.

(h) **Project Readiness to Proceed**

Project is ready to proceed once funding is acquired.

(i) **Strategic Implementation of the Plan and Project Merit**

The CBSM is considered as a starting point to a much larger program of incentive marketing of conservation and on-site management practices that lead to a high benefit-cost ratio. By taking the first step of studying the people's acceptance of the various water conservation and quality programs, the next step will likely include the introduction of structural features, new technology and inter agency agreements.

(j) **Climate Change Effects**

No appreciable effects to Climate Change are anticipated as a result of implementing the CBSM.

(k) **Reducing GHG compared to Project Alternative**

No alternatives analysis to be performed.

(l) **Project Sponsor to adopt IRWM Plan**

Yes.

(m) **Reduce Dependence on Delta Supplies**

The CBSM will not have a direct effect on the use of SWP, but may, in the future, lead to projects which import SWP to the Paso Basin when available, and when not constrained by the Delta.

6.5.2 *Impact and Benefit*

Discuss:

(n) **Potential Impacts and Benefits of Project Implementation**

Project is mostly educational resulting in change in water quality and quantity over a long period of time. The increase in both is too small to quantify at the expected level of implementation.

(o) **When a more Detailed Project-Specific Impact and Benefit Analysis will Occur**

Not applicable at this stage in the program.

6.5.3 *Plan Performance and Monitoring*

(p) **What is Proposed Methods of Monitoring Project Performance**

Monitoring will likely be qualitative in terms of the amount of water conserved or the improvements in water quality. The project will maintain a record of which practices are succeeding in terms of public acceptance and volunteer implementation. This includes a measure of perceived (i.e. doing good for the environment and water) and realized (i.e., economic savings through reduction in energy or chemical costs) public incentives through program implementation.

6.5.4 *Financing Strategies*

What is the plan for implementation and financing of project and programs including:

(q) **Known and Possible Funding Sources**

Support from state, federal and local grants are being sought for funding. In-kind services will likely be used for local cost share or match dollars.

(r) **Funding Mechanisms, Including Water Rates, etc.**

None.

(s) **How O&M Costs for Projects will be Covered**

Annual implementation costs of the program will be funded through an escrow account setup through grant funding sources.

Project Code	Project Title	Project Cost	Question 1: Funding Source and % of Total Cost	Question 2: Certainty/Longevity	Question 3: O&M Finance Source
NCNT_WMT1	Community Based Social Marketing	<$250K	Local Contributions through Donations and In-Kind Services (US-LTRCD)	In-kind labor from sponsoring agencies and reporting costs are fully funded	Not Required
			Grant Monies (Prop 84, 3rd Round; USEPA Watershed Grant Program)	None	

6.5.5 *Climate Change*

(t) **Process that Considers GHG Emissions when Choosing between Project Alternatives**

Not applicable.

Project 7. Improving On Farm Water Management Through Demonstration, Research & Outreach of Precision Agricultural Best Management Practices

7.1 Project Number: NCNT_WMT2 and NCNT_WMT3

7.2 Project Location: North County

7.3 Project Sponsor: Vineyard Team and US-LTRCD

Vineyard Team and Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)[3]

Source: <http://westernfarmpress.com/grapes/dry-winter-triggers-early-irrigation-start>

7.4 Project Summary:

Irrigated agriculture is a large user of water and energy in San Luis Obispo County. This program **develops benchmarks for energy and water conservation** by identifying through **pump efficiency and irrigation distribution uniformity analysis** poorly performing irrigation systems. Applications will be accepted from **growers willing to cost share system components**, **adjust management practices, and share findings and conclusions with the public.** The Center for Irrigation Technology and Advanced Viticulture will aid in experimental design and control. Soil moisture meters and weather stations will be installed on 5 North

[3] The Vineyard Team project titled, "Tracking and Conserving Vineyard Irrigation Water in the Paso Robles Groundwater Basin," was combined with the US-LTRCD project given the similarities of the two projects and willingness to move forward together in the project's implementation.

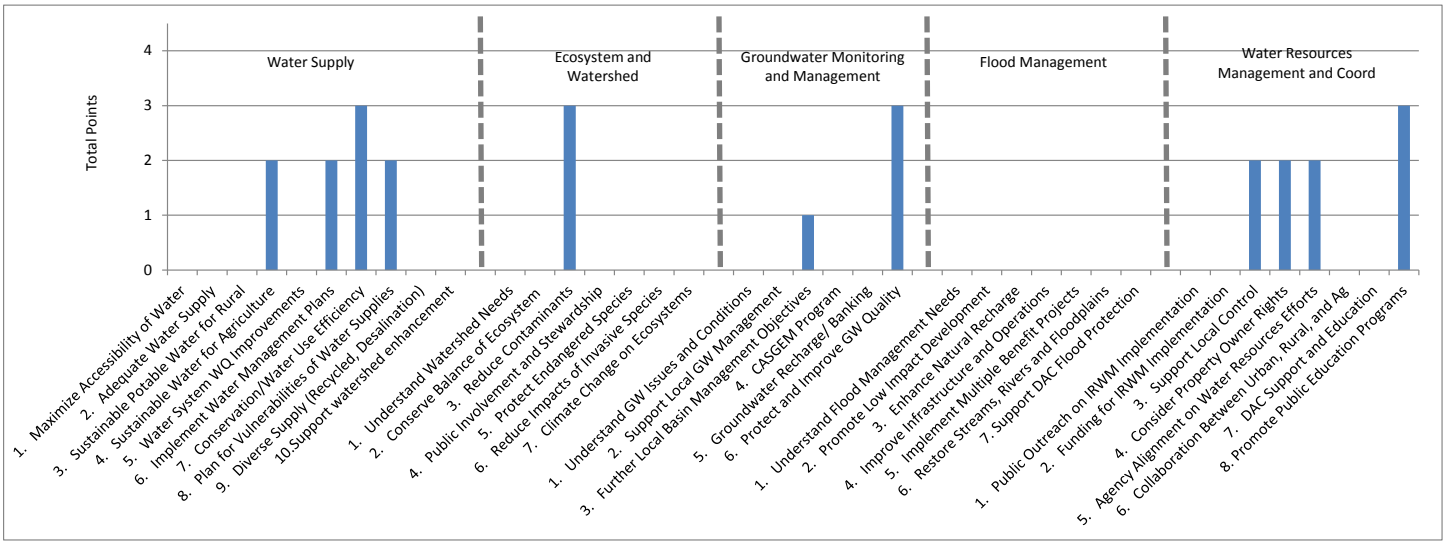
County sites. The sites will be monitored for 2-3 growing seasons, and system performance evaluated by **changes in crop yields, and water and energy use**. The findings of this project will be made available to the public by reports, website outreach, and workshops generated by the US-LTRCD, Vineyard Team and Stockman's Energy. **Growers who receive the systems will be able to keep the equipment, but will be required to pay for any ongoing costs after the research has been completed.**

Available Source Documents: *County General Plan Conservation and Open Space Element; Agriculture Element*

7.5 IRWM Plan Section Information and Analysis:

7.5.1 *Project Solicitation and Ranking*

How does the project:



(a) **Contribute to Plan Objectives**

Project fully satisfies the following Objectives:

[This project hints at being a Research Project vs. and Water Conservation Program. I think we need to stay away from Research Project and couch as a conservation program with monitoring and reporting.]

Water Supply - **Conservation/ Water Use Efficiency**

Provide education and expose new technologies to agricultural growers for the purpose of providing the precise amount of water needed for healthy plant growth and reducing water use during peak growing seasons.

Ecosystem and Watershed Restoration – **Reduce Contaminants**

Through improved technology, precise water requirements can be applied and thereby reduce the release of contaminants through runoff due to over irrigation. Groundwater also benefits due to ensuring irrigation does not exceed consumptive crop uses, allowing fertilizer-bearing water to percolate to shallow fresh water

aquifers used for drinking water.

Groundwater Management – **Protect and Improve Groundwater Quality**

By reducing excessive application of water, this program reduces one of the largest contributors of non-point source pollution to groundwater and surface water. By providing only the amount of water the plants need for crop uptake and evapotranspiration, there is less water to move off-site either by means of overland runoff (to streams which recharge the basin) or by deep percolation to groundwater supplies.

Water Resources Management – **Promote Public Education**

The program will create scientific reports, public education forums, exhibits, and materials to bring awareness to the IRWM planning regions (i.e., North County). Both the US-LTRCD and Vineyard Team maintain websites at <http://us-ltrcd.org/> and < http://www.vineyardteam.org/>, respectively. Both will be used to showcase the results of the project internationally, and reports will be compiled for interested community members.

Secondary Objectives

The targeted irrigation program has an abundance of public visibility and education opportunities for the IRWM region overall, but especially in the North County. Although difficult to quantify, water quality and economic benefits of reduced water use could lead to more efficient water use in the larger agricultural community and grow over time. Other improvements include: improved drinking water quality, environmental instream benefits and healthier ecosystems, and reduction in invasive species reliant on excess nutrients in surface water.

(b) **Relate to WMS, RMS and Objectives**

SLO Recommended Project Elements are identified as follows:

DWR State Objectives	DWR RMS	SLO WMS	SLO Recommended Project Elements	IRWM Objectives
• Demand Reduction	• Agricultural Water Use Efficiency	• Water Conservation	• Provide public education in the value of conserving water for purposes of achieving sustainable surface water and groundwater drinking water supplies. • Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater.	• Conservation/ Water Use Efficiency • Reduce Contaminants • Protect and Improve Groundwater Quality • Promote Public Education

(c) **Technical Feasibility and Justification**

North County Agricultural Growers will be the main beneficiaries of this project. Through improved use of technology, precision irrigation systems increase the amount of flow, weather and soil information available to the grower, which can lead to more precise management decisions that have beneficial results on profits,

by decreased energy costs for the grower, and environmental benefits such as decreased groundwater pumping, carbon emissions and fertilizer leeching.

Widespread adoption of irrigation system BMPs can have a dramatic effect towards increasing the stability and sustainability of the Paso basin. Acceptance of these systems in the North County, can lead to their greater presence throughout all of SLO County, putting the county in a position to be a leader in sustainable, precision agriculture systems. The goal of these systems is to maximize productive yields per acre while reducing, to the maximum extent possible, negative effects on the environment. Implementation of these practices does not require large equipment costs to the farmer, and results are felt immediately serving as an economic incentive by reduced water bills.

Findings from this project will be used to validate the impacts of advanced technology and management practices. Additionally, it will help to inform energy and water conservation incentives offered by agencies and public utilities. Growers involved in the project will receive irrigation system improvements that will increase irrigation efficiency and reduce their energy and water usage over a growing season and demonstrate success to other growers. Other collaborators will get data which will be used to develop irrigation management plans that meet energy and water conservation goals.

While not targeted specifically, both public and private rural groundwater users benefit because the ultimate net effect of wide adoption of targeted irrigation practices is an increase of surface and groundwater quality and quantity. Many municipalities, rural residential and agricultural operations depend on groundwater pumping to meet their drinking water needs.

A research/demonstration site will show the benefits of these systems to the public. Data will be shared with all interested parties to share the pros and cons of the systems. Ag related non-profits can collaborate to bring these technologies to their clients. The US-LTRCD and Vineyard Team will run workshops which can be set up to show how to install and use these systems. Identification of target applied irrigation rates will allow for the study and monitoring of whether microclimate analysis can function at a county-wide scale for the purposes of establishing thresholds for conservation.

The total cost for this project is estimated to be $85,000 in capital costs and $165,000 in labor costs over three years with $5,000 in annual operations cost to monitor and report on program.

(d) **Benefit DACs**

Not applicable over agricultural areas.

(e) **Environment Justice**

No impacts to low income communities will occur as a result of this project.

(f) **Cost and Financing**

$85,000 Purchase of Irrigation Technology

$165,000 Installation labor over 3 years

Total of $250,000

$5,000 Annual monitoring and reporting

(g) **Feasibility through Economic Analysis**

A cost effectiveness economic analysis has not been completed for this project. The project has an indirect cost of reducing the cost to pump and treat water. Of the DWR methods for quantifying benefits, method Section D1 – Cost Effective Benefits Analysis will likely be selected for on-farm reduced energy benefits. The ability to assign benefits is tied to the ability to specifically measure the energy saved due to BMP implementation. The size of area anticipated for BMP implementation should be large enough to see quantifiable differences in irrigation well energy consumption.

(h) **Project Readiness to Proceed**

Project is ready to proceed once funding is acquired.

(i) **Strategic Implementation of the Plan and Project Merit**

The project is considered as a research program which could lead to a much larger program of incentive marketing of conservation. By taking the first step of studying effectiveness of the various water agricultural water use and conservation technologies, additional programs may branch out to introduce structural features, additional technology and inter agency agreements for higher utilization.

(j) **Climate Change Effects**

No appreciable effects to Climate Change are anticipated as a result of implementing the project.

(k) **Reducing GHG compared to Project Alternative**

One goal of this project is to quantify the conservation benefits of a specific practice: continuous soil and weather monitoring, using a methodology developed by Dr. Mark Greenspan, modeled after studies performed by the Sonoma County Water Agency. Alternative methods that will be investigated include the use of flow meters to measure and monitor instantaneous water use and seasonal application rates. It is expected that reducing GHG emissions will be a part of this analysis.

(l) **Project Sponsor to adopt IRWM Plan**

Yes.

(m) **Reduce Dependence on Delta Supplies**

Potential reduction if SWP is used as irrigation or groundwater recharge source of supply in the future.

7.5.2 ***Impact and Benefit***

Discuss:

(n) **Potential Impacts and Benefits of Project Implementation**

This program will base grower program participation through the identification of inefficient irrigation systems in the North County. By definition, these inefficient systems are wasteful with their energy and water use, which will be quantified by reviewing previous years energy bills and comparing to bills after system and management upgrades are installed and implemented.

The research project relies on finding sites with land managers willing to risk productivity for increased irrigation efficiency and data resources. Growers often cite the high cost of systems as a barrier to adoption.

There is a risk factor associated with adopting an unknown technology, due to a potential for decreased yields, so a research project demonstrating the feasibility and profit potential for these BMPs, that also results in increased yields and/or fruit quality allows for greater penetration of these efforts.

Project is mostly educational resulting in change in water quality and quantity over time. The increase in both is considered to be difficult to quantify at the expected level of implementation.

(o) **When a more Detailed Project-Specific Impact and Benefit Analysis will Occur**

Given the relatively low implementation cost and almost study nature of this project, a more thorough analysis will be provided with any grant funding requirements.

7.5.3 *Plan Performance and Monitoring*

(p) **What is Proposed Methods of Monitoring Project Performance**

Actions to monitor the benefit of the project implementation will include water quality, keeping track of each method of irrigation separately in order to test their effects and quantify their benefits on both crop production and water quality. The area of implementation and amounts of water use reduction are believed to be significant enough to see a difference from baseline monitoring results taken prior to on-site program implementation.

Savings will be analyzed and reported on a per site basis, and will be compared to other sites around North County. Results will also be calculated on a per acre basis and reported along with the potential energy reduction if widespread adoption of these technologies and practices were to occur.

7.5.4 *Financing Strategies*

What is planned for implementation and financing of project and programs including:

(q) **Known and Possible Funding Sources**

Project is seeking grant funding along with providing local in-kind services for local match. Other partners in this project include Stockman's Energy, Center for Irrigation Technology - Fresno State University, Advanced Viticulture/Dr. Mark Greenspan.

(r) **Funding Mechanisms, Including Water Rates, etc.**

None.

(s) **How O&M Costs for Projects will be Covered**

Annual budget for US-LTRCD will cover planned O&M Costs.

Project Code	Project Title	Project Cost	Question 1: Funding Source and % of Total Cost	Question 2: Certainty/Longevity	Question 3: O&M Finance Source
NCNT_WMT2	Improving On Farm Water Management Through Demonstration, Research & Outreach of Precision Agricultural Best Management Practices	$250K-$500K	Local Contributions through Donations and In-Kind Services (US-LTRCD and Vineyard Team)	In-kind labor from sponsoring agencies and reporting costs are fully funded	Not Required
			Grant Monies (Prop 84, 3rd Round; USEPA Watershed Grant Program)	None	

7.5.5 *Climate Change*

(t) **Process that Considers GHG Emissions when Choosing between Project Alternatives**

This project demonstrates reduced GHG emissions through water and energy use efficiency by utilizing irrigation system evaluation methods and advanced flow, soil moisture, and weather measurement technologies. Additionally, this project identifies opportunities to reduce energy waste through the application of pump efficiency testing and retrofit, energy efficient pump controls, and diesel repowering. Finally, once pumping systems are electrified and operating efficiently, the opportunity is available to utilize on-site renewable energy generation. All of these strategies support reduction of regional GHG Emissions.

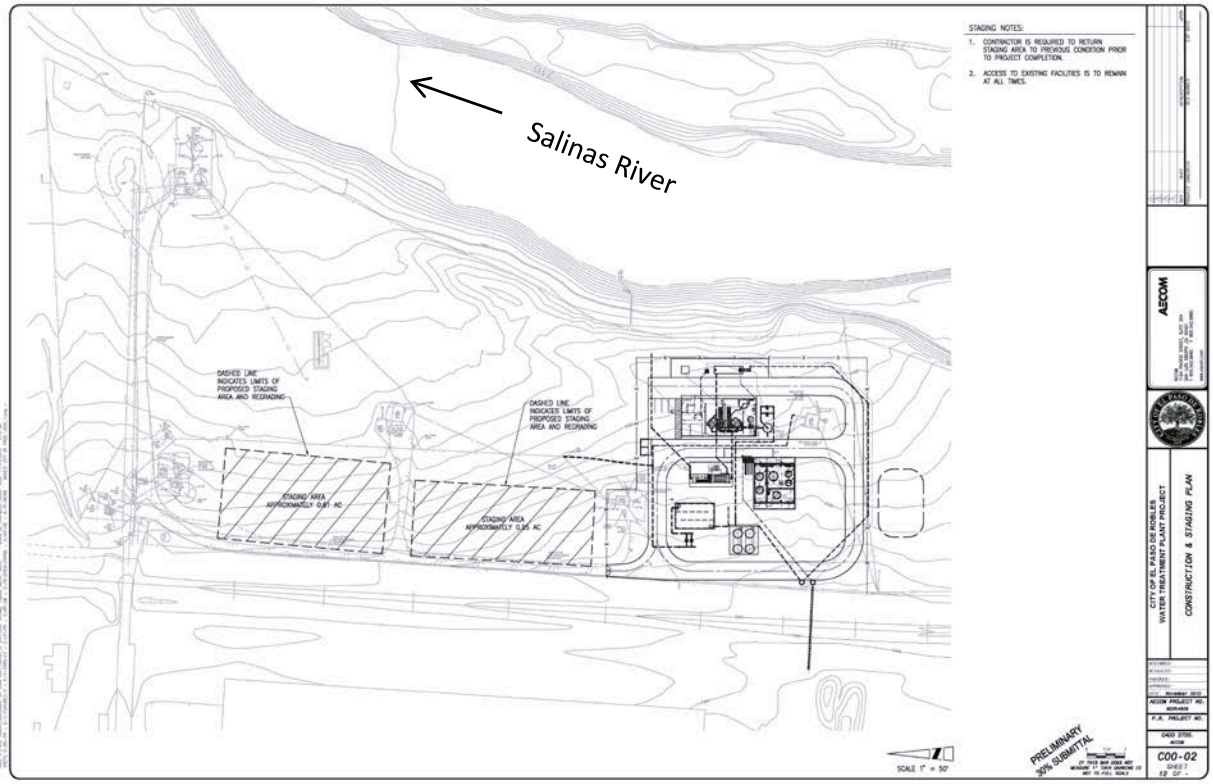
Project 8. City of Paso Robles Lake Nacimiento Water Treatment Plant Construction

8.1 Project Number: NCNT_WSP1

8.2 Project Location: North County

8.3 Project Sponsor: City of Paso Robles

City of Paso Robles



Source: Prop 84, 2013 Grant Application

8.4 Project Summary:

The City of Paso Robles currently relies on water from two sources: Salinas River underflow wells and groundwater from the deeper formation of the Paso Robles Groundwater Basin. Significant groundwater level declines in City wells and other basin wells have been occurring since the 1990's. San Luis Obispo County has certified the basin as a Level of Severity III, indicating the demand for water will equal or exceed its supply before supplemental supplies can be developed. The Lake Nacimiento Water Treatment Project will provide additional potable water for the City of Paso Robles, enabling the City to reduce groundwater pumping within the overdrafted Paso Robles Groundwater Basin.

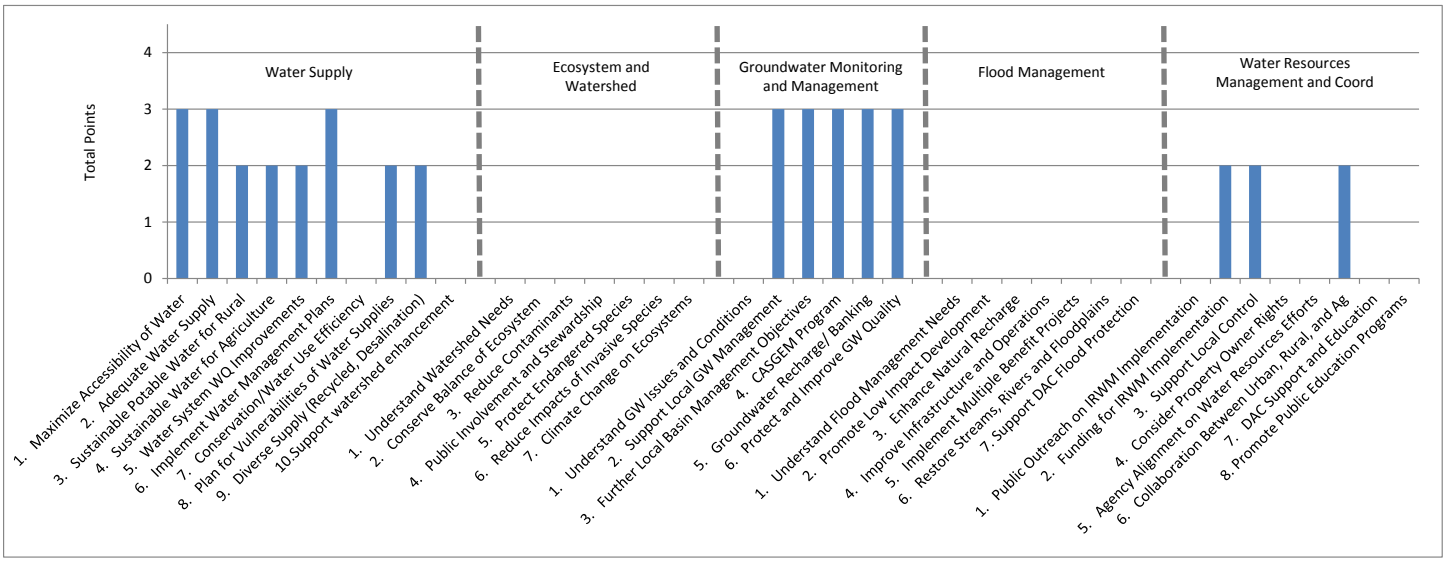
City of Paso Robles water deliveries for 2005 and 2010 were 7,163 acre-feet per year (AFY) and 5,749 AFY, respectively. Water deliveries in 2010 were much lower than 2005 deliveries because of mandatory City-wide outdoor water use restrictions implemented in 2009. Level 2 of the City's Water Conservation Ordinance and Water Shortage Contingency Plan (See Attachment) was implemented to reduce summer peak water demands and thereby manage a projected water production shortfall of 20 percent. These restrictions will be lifted when the Lake Nacimiento surface water supply becomes usable by Paso Robles. As the projected customer water deliveries are expected to increase to 12,460 AFY in 2035 (2010 UWMP).

Available Source Documents: *City of Paso Robles, General Plan; City of Paso Robles UWMP; City of Paso Robles Water Resources Plan Integration and Capital Improvement Program; Paso Robles Groundwater Basin Management Plan*

8.5 IRWM Plan Section Information and Analysis:

8.5.1 *Project Solicitation and Ranking*

How does the project:



(a) **Contribute to Plan Objectives**

Project satisfies the following Objectives:

Water Supply – **Maximize Accessibility of Water**

The project is exercising a portion of the County's surface water rights of 17,500 AFY from Lake Nacimiento. The first phase is committing to 4,000 AFY.

Adequate Water Supply

The project is ensuring sustainability of groundwater supplies and improving conjunctive use of surface water and groundwater. The frequency of severe rationing is anticipated to decrease significantly with the addition of a new supply and allowing for the ability to bank groundwater for use in the dry years.

Implement Water Management Plan

The project is a part of the region's overall vision for improving the Paso Basin critical health status. As a regional project, the benefits are expected to reach beyond the City of Paso's boundaries.

Groundwater Management – **Support Local Groundwater Management**

The project is consistent with the Paso Basin Groundwater Management Plan(s) and provides basin-wide benefits on both local and regional levels.

Further Local Basin Management Objectives

As a specific BMO in the local City of Paso Robles Groundwater Management Plan. [is there a separate City GMP as well as the basin GMP? Do we do a GHG study on the initial and potential subsequent phases of the plant?] (http://www.vineyardteam.org/files/resources/Larson,%20Keith.pdf)

CASGEM Program

The project will install dedicated monitoring wells for purposes of groundwater management and measuring the level of benefit the project is providing to the conjunctive use operations of the basin over time.

Groundwater Recharge/Banking

As a conjunctive use project, the banking of groundwater is an essential element of its success over time. The basin's recovery is the priority concern, next is sustainability at an accepted level operational level consistent with a safe sustainable yield of the basin overall, and then managing the levels over time to not exceed the yield and levels.

Protect and Improve Groundwater Quality

The project is a means of halting the declining groundwater elevations and keeping the upwelling of high TDS groundwater into drinking water aquifers.

Secondary Objectives

The project is one of many necessary projects to fully maximize the available surface water in the Paso Basin. Projects of this type and magnitude realize regional benefits reducing on-going conflict between urban, agriculture, and rural groundwater users. While growth is an element of this project, the reduction of groundwater use addresses the existing problem. In this case, growth will be paying for further expansion over time.

(b) **Relate to WMS, RMS and Objectives**

SLO Recommended Project Elements are identified as follows:

DWR State Objectives	DWR RMS	SLO WMS	SLO Recommended Project Elements	IRWM Objectives
• Increase Water Supply • Improve Water Quality	• Drinking Water Treatment and Distribution • Pollution Prevention	• Water and Wastewater Treatment • Water Supply Reliability • Water Quality Protection and Improvement • Groundwater Management	• Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Implement groundwater management projects to improve the quality and quantity of groundwater in accordance with a regional stakeholder-based groundwater basin plan.	• Maximize Accessibility of Water • Adequate Water Supply • Implement Water Management Plans • Support Local Groundwater Management • Further Local Basin Management Objectives • CASGEM Program • Groundwater Recharge/ Banking • Protect and Improve Groundwater Quality

(c) **Technical Feasibility and Justification**

The City of Paso Robles's water supply is subdivided into two sources according to water rights. These are Salinas River underflow and percolating water of the Paso Robles Groundwater Basin. Salinas River underflow refers to shallow groundwater in direct hydraulic connection with the Salinas River. This underflow is subject to appropriative surface water right and permitting by the State Water Resources Control Board (SWRCB). An approved SWRCB application (Application filed 1941; Permit number 5956 issued November 6, 1981) allows the City of Paso Robles to extract up to eight cubic feet per second (cfs or 3,590 gpm) with a maximum extraction of 4,600 AFY (January 1 to December 31). The river wells typically account for approximately half of the City of Paso Robles's current supply (table below).

Since 2005, the City of Paso Robles's use of underflow has ranged between 84% and 99% of the full appropriation; the maximum annual underflow well production was 4,558 AF (2005) and the minimum was 3,868 AF (2009). The City of Paso Robles is considering additional wells near the river to optimize pumping. Future operation of the underflow wells will involve an optimum pumping plan that limits instantaneous flow rates to eight cfs while maximizing the permitted annual production of 4,600 AFY.

The second source of supply for the City of Paso Robles are the twelve wells that extract water from the Paso Robles Groundwater Basin. These wells typically account for less than half of the City of Paso Robles's groundwater supply. The basin is the primary shared water source for municipal, rural residential users, and the extensive agricultural lands in North County Subregion of San Luis Obispo County. Many well owners, including the City of Paso Robles, have suffered a significant reduction in well capacity or had their wells go dry. The City of Paso Robles has regularly experienced seasonal water supply shortfalls since the mid-2000s. Mandatory summer outdoor water use restrictions have been in place in Paso Robles since 2009. The City of Paso Robles identified the need for supplemental water supplies to meet current and future needs in its 2000, 2005, and 2010 Urban Water Management Plans (plans on file at DWR).

In 1959, the San Luis Obispo County Flood Control and Water Conservation District (District) signed an agreement with Monterey County Water Resources Agency that entitled the District to 17,500 AFY of the annual yield of Lake Nacimiento for uses in San Luis Obispo County. In 2004, the District entered into Nacimiento Project Water Delivery Entitlement Contracts with the City of Paso Robles, San Luis Obispo County, Templeton CSD, Atascadero Mutual Water Company, and the City of San Luis Obispo, to construct the Nacimiento Water Project to deliver untreated lake water (Water Delivery Entitlement Contract 2004). These communities have committed to take delivery of 9,655 AFY, with the City of Paso Robles committing to 4,000 AFY at this time. Commitment of the remaining supply is being considered by these and other water agencies, including the City of Paso Robles. The Nacimiento Water Project began delivering water in 2011.

The City of Paso Robles Lake Nacimiento Water Treatment Plant project includes the construction of a potable water treatment plant necessary to begin taking its water allocation. With delivery of Nacimiento water, the City of Paso Robles can significantly reduce pumping from the Paso Robles Groundwater Basin. Looking ahead, the City of Paso Robles projects increased deliveries (using groundwater) to meet increasing demand, to about 3,400 AFY. This volume is less than was pumped by the City of Paso Robles in 2008 prior to mandatory landscape watering restrictions being implemented. However, the City of Paso Robles continues to consider alternative supplies including additional supply from Lake Nacimiento and recycled water.

(d) **Benefit DACs**

The City of Paso Robles is not a state certified DAC.

(e) **Environment Justice**

Project does not pose any risk or environmental degradation to low income area.

(f) **Cost and Financing**

Paso Robles's City Council approved the water rate increases necessary to fund the construction and operation of the water treatment plant project. The Prop 218 process was completed in 2011 and water rates are in place.

(g) **Feasibility through Economic Analysis**

Of the DWR methods for quantifying benefits, method Section D3 – Monetized Benefits Analysis has been selected based on the grant amount and the ability to monetize the benefits in terms of an annual dollar value for each year of the project's operation. Project benefits are to be expressed as the cost of water saved by not having to import SWP, or other, water or construct a desalinization water treatment plant.

(h) **Project Readiness to Proceed**

Project is in the implementation phase with planned completion by end of 2015.

(i) **Strategic Implementation of the Plan and Project Merit**

Project is considered as large step toward bringing a solution to Paso Basin critical condition with declining groundwater elevations, higher pumping costs and energy usage in the basin, water quality degradation, and private and public wells going dry. The multi-objective nature of the project is well suited for the plan.

(j) **Climate Change Effects**

Expected energy use in pumping requirements associated with any public water system will effect GHG emissions. Initially, the project's energy usage will off-set energy not being used by wells.

(k) **Reducing GHG compared to Project Alternatives**

While not specifically addressing GHG, a comprehensive water supply alternatives evaluation was done as part of the EIR for the Nacimiento Water Project (December 2003). Several project alternatives were considered, including:

- State Water Project through the Coastal Branch
- Desalination of Seawater
- Reclamation of Wastewater
- Enlargement of Salinas Dam
- Enlargement of Lopez Dam
- Enlargement of Nacimiento Dam
- Possible construction of new reservoirs
- Weather Modification
- Various Nacimiento water treatment plant sizes and configurations

The Nacimiento Water Project was selected because of its high rankings with regard to anticipated quantity of water yield, water supply reliability, estimated cost, and ease of environmental and regulatory permitting. Additional information on the alternatives evaluation can be found in the Nacimiento Project EIR.

(l) **Project Sponsor to adopt IRWM Plan**

Yes.

(m) **Reduce Dependence on Delta Supplies**

Project does not rely on the SWP.

8.5.2 ***Impact and Benefit***

Discuss:

(n) **Potential Impacts and Benefits of Project Implementation**

The project has a certified EIR and covers the project impacts and mitigation. Project is a Capital Project to construct a WTP off of the existing Nacimiento Pipeline. Project is expected to decrease the amount of groundwater pumping and allow for additional demand in the future for projected growth. Assumption is that 4,000 AFY of groundwater pumping will be permanently reduced on average.

(o) **When a more Detailed Project-Specific Impact and Benefit Analysis will Occur**

Project is under implementation. No additional analysis will occur.

8.5.3 ***Plan Performance and Monitoring***

(p) **What is Proposed Methods of Monitoring Project Performance**

Project performance can be measured both by increased groundwater quality and groundwater elevations over the 10-year monitoring period using dedicated monitoring wells and in-system water quality testing.

8.5.4 *Financing Strategies*

What is the plan for implementation and financing of project and programs including:

(q) **Known and Possible Funding Sources**

The City of Paso Robles has implemented the necessary fee and rate adjustments to pay for the first phase of the project. Additional phases may come from new growth or public grant funding.

(r) **Funding Mechanisms, Including Water Rates, etc.**

The City of Paso Robles has water fees and rates to pay for capital and O&M.

(s) **How O&M Costs for Projects will be Covered**

The City of Paso Robles O&M program is funded by existing customers through their water rates.

Project Code	Project Title	Project Cost	Question 1: Funding Source and % of Total Cost	Question 2: Certainty/Longevity	Question 3: O&M Finance Source
NCNT_WSP1	City of Paso Robles Lake Nacimiento Water Treatment Plant Construction	>$5M	City of Paso Robles has implemented the fee and rate adjustments to pay for the first phase of the project	In-kind labor from City of Paso Robles and reporting costs are fully funded; capital cost contributions are fully funded through current rate program	City of Paso Robles O&M Program can support project operations, maintenance, and replacement costs in perpetuity
			Grant Monies(Prop 84, 3rd Round) are being sought to offset the first phase costs as construction is taking place to reduce stress on existing rate payers	None	

8.5.5 *Climate Change*

(t) **Process that Considers GHG Emissions when Choosing between Project Alternatives**

No additional analysis is anticipated given the first phase implementation. Additional phases will be the logical extension of the initial phase.

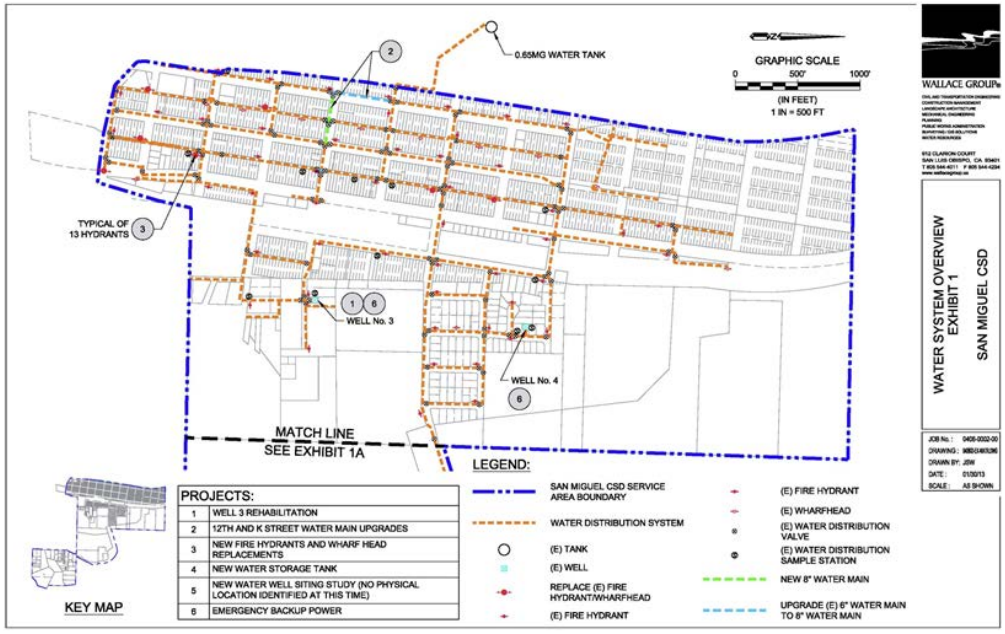
Project 9. San Miguel Critical Water System Improvements

9.1 Project Number: NCNT_WSP2

9.2 Project Location: North County

9.3 Project Sponsor: SMCSD

San Miguel Community Services District (SMCSD) Water System Improvements - Disadvantaged Community



Source: Prop 84 2013 Grant Application

9.4 Project Summary:

This project is seeking **construction of six of the highest priority, critical water supply projects** as listed below. The District needs to implement all six of these identified projects in the immediate future, or they will be faced with **continued deterioration of an already deficient water system**, and may not be able to support even limited beneficial growth with the identified deficiencies that face the District's water system.

1. **New Fire Hydrants and Wharf Head Replacements** – Thirteen (13) new fire hydrants to replace inadequate and aging hydrants.
2. **Well 3 Rehabilitation -** Well 3 is over 40 years old and requires upgrades in the well motor housing, disinfection system, electrical wiring, backup power generation and the protective structural building.
3. **New Water Well Siting Study** – Respond to the urgent need of replacing the San Lawrence Terrace Well, taken out of service because of high arsenic concentrations, and providing water supply redundancy in the event of an emergency shutdown of any three existing wells.

4. **Emergency Backup Power** – Equip Well 3 and Well 4 with power generators (100 kW and 150 kW, respectively) in the event of power failures to maintain a minimum supply of water during widespread power outages.
5. **New Water Storage Tank** – Construct the San Lawrence Terrace Water Storage Tank with 0.25 million gallons for capacity and water quality improvements.
6. **12th and K Street Water Main Upgrades** – Replace old and undersized piping at 12th Street and K Street.

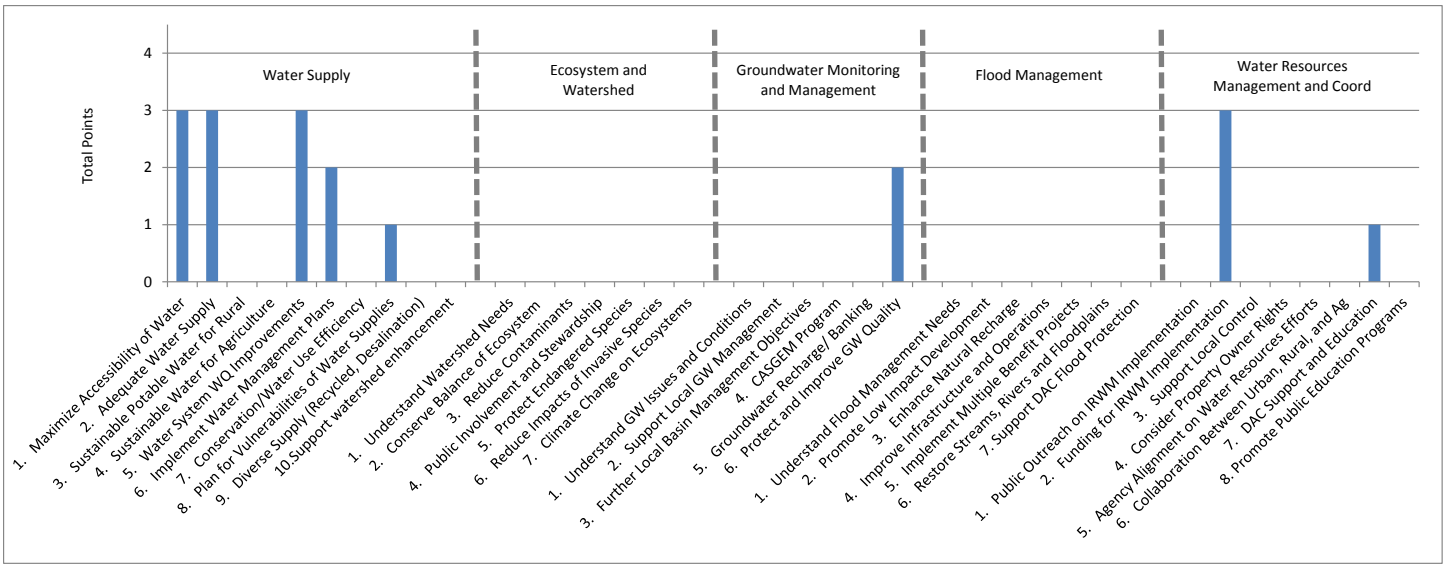
To finance existing system improvements, **SMCSD recently increased rates to pay the debt service for the 0.65 MG tank and begin a sinking fund for replacement/rehabilitation of the aging water system**. This was the SMCSD's first water and sewer rate increases in over a decade. **Being a DAC, this was extremely hard on the majority of the community's residents**.

Available Source Documents: *San Miguel Community Plan (2013), Infrastructure and Utilities*

9.5 IRWM Plan Section Information and Analysis:

9.5.1 *Project Solicitation and Ranking*

How does the project:



(a) **Contribute to Plan Objectives**

Project satisfies the following Objectives:

Water Supply – **Maximize Accessibility of Water**

Overall system improvements increase the availability of water supply to provide additional capacity to meet peak hour and fire flow demands. Groundwater, the only source of drinking water, is considered to be within its sustainable yield around the localized area of San Miguel.

Adequate Water Supply

San Miguel, a DAC, is in need of critical water supply improvements to meet deficiencies in both the volume

of water and the rated peak hour and fire flow capacity.

Water System Water Quality Improvements

Radionuclides are naturally found in indigenous groundwater supplies threatening the quality of water supply from these existing wells. The siting of a new well with test hole drilling and full analysis will provide for improved water quality and the ability to phase out old wells which exceed the allowable maximum contaminant limits (MCL).

Water Resources Management – **Funding for IRWM Implementation**

The project has sought and continues to seek much needed funding through various grant programs for capital facilities identified as critical in their 2002 Water Supply Master Plan. SMCSD has showed commitment to funding this critical DAC water supply project since 2002 with no success.

Secondary Objectives

As a DAC community, the SMCSD is seeking support from outside funding for their critical water supply needs. Existing water rates are already high to operate and maintain an aging system with need of replacement and repairs. The project, as described, meets the minimum required facilities to bridge the funding gap and provide for meeting Title 22 drinking water standards, and fire flow requirements. Additional benefits include water system redundancy for protection of system outages or water quality issues.

(b) **Relate to WMS, RMS and Objectives**

SLO Recommended Project Elements are identified as follows:

DWR State Objectives	DWR RMS	SLO WMS	SLO Recommended Project Elements	IRWM Objectives
• Improve Water Quality	• Drinking Water Treatment and Distribution	• Water Supply Reliability • Water Quality Protection and Improvement	• Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Seek outside funding for water and flood control projects in low income areas	• Maximize Accessibility of Water • Adequate Water Supply • Water System Water Quality Improvements • Funding for IRWM Implementation

(c) **Technical Feasibility and Justification**

<u>Upgrades to Well 3 – Water Supply Reliability, Water System Reliability, Reduced Energy</u>

Well 3 upgrades will bring 40 year technology and energy efficiencies to modern day standards of improved electrical equipment, pump design and control valve operations. Along with the standby generator project, Well 3 will have the highest reliability of water supply in the system and the lowest per gallon operations cost due to these proposed rehabilitation efforts.

Siting of New Well – Water Supply Reliability, Water System Reliability

In addition to their aged condition, radionuclides in water supply Well 3 and Well 4 have been increasing in concentrations over the years. The appendices to the 2002 Water Master Plan portray the historic radionuclide information for Wells 3 and 4. Clear trends of increasing radionuclide concentrations are evident. Since this "trending" analysis was completed in 2002, there have continued to be periodic isolated exceedences for this primary MCL. A new water supply well, with screened casing in a different aquifer zone, will allow the SMCSD to yield a new water supply which reliably meets all drinking water standards. The new well siting study will help pinpoint the best location, and optimum screened interval to accomplish the addition of a new safe and reliable water supply for the community.

Replace Fire Hydrants – Water Supply Reliability, Water System Reliability

SMCSD has identified a total of 13 old and aging fire hydrants and undersized wharfhead hydrants. The old aging fire hydrants are considered by operations staff to be unreliable any longer, for yielding fire flows during emergencies. This poses a serious safety threat during fire emergencies. Also, the existing wharfhead hydrants are 2" diameter, and substantially below standard (6" standard hydrant) for delivering adequate fire flows.

New Well Siting Study – Water Supply Reliability, Water System Reliability and Reduced Energy

In April 2003, the SMCSD retained the services of a local hydrogeologist to conduct a preliminary well siting study for installation of new municipal water wells. The report (Cleath & Associates) identified two potential sites; north of the Mission San Miguel in the southern portion of the town, and north of Lillian Larson School in the northern portion of the town. In 2010, the SMCSD pursued a USDA grant/loan (similar to that implemented for the new water tank construction) to complete the necessary site investigations, but found that USDA no longer had any grant monies available. The project had since been postponed due to lack of funding.

The SMCSD must continue to pursue the installation of at least one new water supply well in order to secure water supply reliability for today's water demands and to ultimately supplement inefficient 40 year old wells with a new energy efficient well. This new well siting study would essentially build upon the prior study completed in 2003, and will include a more detailed analysis of the two identified well sites including property acquisition, pilot hole drilling, logging of the pilot holes, and water quality testing to verify the quality of groundwater in these two areas.

Power Generators for Wells–Water Supply Reliability, Water System Reliability

The SMCSD will utilize two new standby generators at their two existing well sites, Wells 3 and 4. The standby generators will be used during times of extended power outages, and major emergencies such as earthquakes, to ensure the SMCSD can continue pumping groundwater needed for domestic supply and most importantly, for needed fire flow.

Water Distribution System Improvements – Water System Reliability

The SMCSD is pursing to complete an upgrade to existing water piping in the southern area of San Miguel to correct deficient fire flows to the southern San Miguel area including the Mission, a critical tourist attraction to the community. It is also noted that new CDPH standards require new water mains to be a minimum of 8" diameter.

(d) **Benefit DACs**

The community of San Miguel is a DAC.

(e) **Environment Justice**

The project does not impact low income areas and is expressly for the benefit of a DAC.

(f) **Cost and Financing**

The total project cost is estimated at $950,000 including capital costs and labor. Costs are broken down as follows:

Well 3 Upgrades – $200,000

Well 3 and 4 Generator - $200,000

T-main Upgrades - $175,000

Storage Tank - $250,000

Fire Hydrants - $50,000

Well Siting Study - $75,000

(g) **Feasibility through Economic Analysis**

DACs are given special consideration in showing benefits and cost for DAC projects up to a total project cost of $1M. In such cases, the proposal can opt to complete a Cost Effectiveness Analysis, Section D1 – Cost Effectiveness Analysis. In this case, Cost Effectiveness is measured based on evaluating whether the physical benefits provided by the project elements are provided at the least possible cost, or not.

The six sub-projects defining "critical" system improvements have been studied as part of a water master planning effort which assessed the condition of the existing San Miguel Water System. As a suite of improvements to address the critical problem areas, each sub-project is benefiting a defined need based on the standard engineering and business practice of rehabilitating or replacing aging system components (e.g., water mains, well pumps and motors, fire hydrants, etc.) and increasing capacity and reliability as the regulations requiring both change over time (e.g. increased storage and backup water supplies).

(h) **Project Readiness to Proceed**

Project can proceed with the project upon funding.

(i) **Strategic Implementation of the Plan and Project Merit**

Critical water system improvements in low income areas are an important implementation element of the IRWM Plan and meeting its stated Goals and Objectives. The SMCSD submitted a Prop 84 implementation

grants in 2013 that was not funded. They continue to seek outside funding to implement the suite of needed projects. The IRWM Plan is an effective means of accomplishing this goal.

(j) **Climate Change Effects**

The generators will contribute GHG affecting climate change.

(k) **Reducing GHG compared to Project Alternatives**

No cost effective project alternatives are available as an emergency back-up supply of power.

(l) **Project Sponsor to adopt IRWM Plan**

Yes.

(m) **Reduce Dependence on Delta Supplies**

SMCSD does not use SWP.

9.5.2 ***Impact and Benefit***

Discuss:

(n) **Potential Impacts and Benefits of Project Implementation**

Project will have an increase in booster pumping cost to meet peak flow demand from storage tank. Assumed annual water is conservatively assumes the tank empties and fills every day of the year. Generators will only be used during outage and test periods and cannot be directly associated with water lost or gained.

(o) **When a more Detailed Project-Specific Impact and Benefit Analysis will Occur**

The analysis completed as part of the Prop 84 Round 2 Grant Application is sufficient.

9.5.3 ***Plan Performance and Monitoring***

(p) **What is Proposed Methods of Monitoring Project Performance**

Performance is measured based on meeting Title 22 Drinking Water Standards and peak hour flows with no system problems in either quantity or quality of water.

9.5.4 ***Financing Strategies***

What is the plan for implementation and financing of project and programs including:

(q) **Known and Possible Funding Sources**

State and federal grants have been pursued in the past but not awarded. SMCSD is seeking 100 percent outside funding.

(r) **Funding Mechanisms, Including Water Rates, etc.**

SMCSD's existing water rates cannot pay for the needed system improvements.

(s) **How O&M Costs for Projects will be Covered**

SMCSD's rates will pay for O&M of capital facilities once project is completed and operational.

Project Code	Project Title	Project Cost	Question 1: Funding Source and % of Total Cost	Question 2: Certainty/Longevity	Question 3: O&M Finance Source
NCNT_WSP2	San Miguel Critical Water System Improvements	$500K-$1M	San Miguel CSD, a DAC, can provide minimal funding through rates and fees	In-kind labor from San Miguel CSD and reporting costs are fully funded; capital cost contributions are uncertain	San Miguel CSD will pay for replacement capital and long-term O&M.
			Grant Monies (Prop 84, 3rd Round; USEPA Watershed Grant Program)	None	

9.5.5 *Climate Change*

(t) **Process that Considers GHG Emissions when Choosing between Project Alternatives**

See Section H of IRWM Plan – Mitigating or Adapting to Climate Change for brief discussion of climate change and the project.

Project 10. 8th Street Upper Aquifer Well and Nitrate Removal Facility

10.1 Project Number: NCST_GWM1

10.2 Project Location: North Coast

10.3 Project Sponsor: LOCSD

Los Osos Community Services District

Source: Los Osos CSD South Bay Well House

10.4 Project Summary:

The Los Osos Community Services District (LOCSD) is proposing to **construct a new upper aquifer well and nitrate removal system** at an existing water well facility in the community of Los Osos. The project includes installation of a new well with well pump, ion-exchange nitrate removal skid-mounted treatment system, pre-manufactured 600 square foot metal building, 5,000 gallon High Density Polyethylene (HDPE) tank, and various piping to connect the site's existing facilities to the new structures. The new well will be approximately 125 feet deep and it is estimated that the pumping capacity will be 100 gallons per minute (100 AFY). The new well will be drilled adjacent to the existing lower aquifer well at the 8th Street and El Moro Street Utility Water Yard location. Both the new and existing well heads will be enclosed in a new pre-engineered metal warehouse building along with the nitrate removal treatment equipment. The existing wellhouse for the lower aquifer will be demolished. Water from the new well will be pumped through the nitrate removal facility and then piped to the main LOCSD water distribution system. **Brine from the nitrate removal ion exchange unit will be stored** in a 5,000 gallon tank adjacent to the wellhouse building and **periodically trucked offsite to an approved disposal facility**. Based on the capacity of the new well pump, it is estimated that the brine tank will need to be drained approximately four (4) times per week.

On August 5, 2008, the Court approved an Interlocutory Stipulated Judgment (ISJ) between LOCSD, Golden State Water Company, S&T MWC and the County. The ISJ formed a Working Group with the purpose of

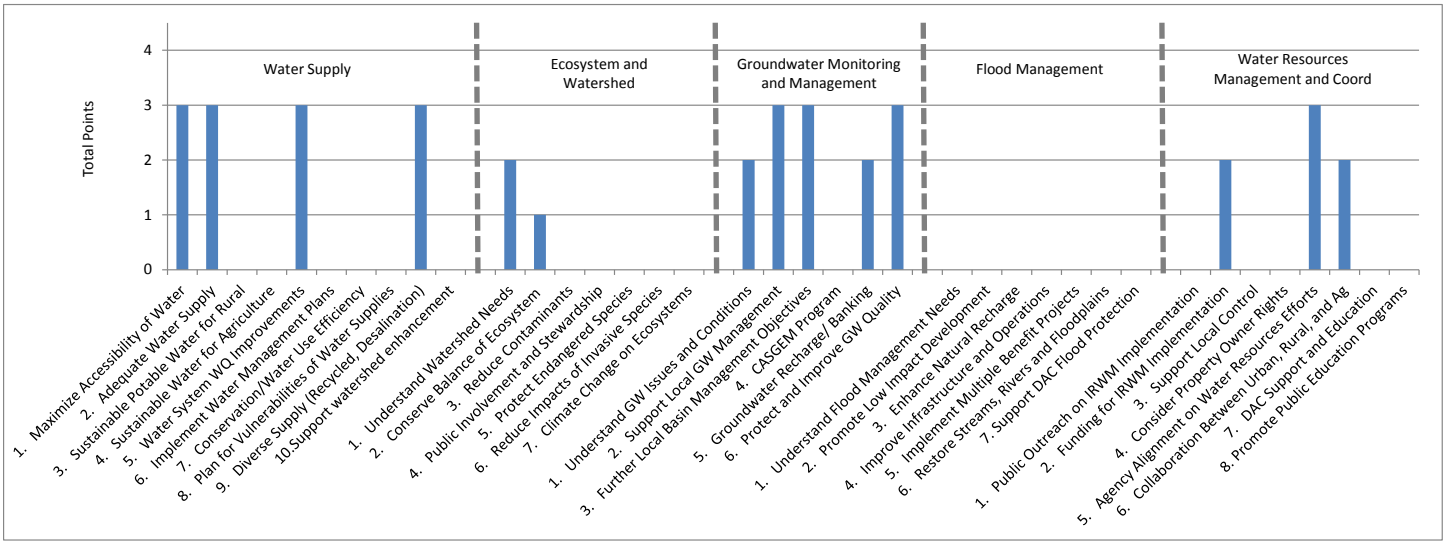
researching the current condition and uses of the Los Osos Groundwater Basin, and adopting a Basin Management Plan (Basin Plan) to resolve conflicting claims related to Basin water resources. The Basin Plan is the result of those efforts and is intended to fulfill the obligations of the Parties pursuant to the ISJ. As a member of the ISJ Working Group, LOCSD has identified certain projects that provide an overall benefit to the groundwater basin. This project will ultimately benefit all Water Purveyors in the Los Osos Basin (Golden State Water Company, S&T Mutual Water Co. and LOCSD) by reducing the pumping on the Lower Aquifer and increasing the production from the Upper Aquifer, which will help reduce sea water intrusion and reduce the risks to each of the water purveyor's water supply wells.

Available Source Documents: *Los Osos Water Master Plan; Los Osos, Sea Water Intrusion Assessment and Lower Aquifer Source Investigation of the Los Osos Valley Ground Water Basin; Los Osos , Public Draft Review Basin Plan for the Los Osos Groundwater Basin*

10.5 IRWM Plan Section Information and Analysis:

10.5.1 *Project Solicitation and Ranking*

How does the project:



(a) **Contribute to Plan Objectives**

Project satisfies the following Objectives:

Water Supply – **Maximize Accessibility of Water**

Project implementation results in a higher beneficial use of the nitrate contaminated shallow aquifer of the Los Osos Valley Groundwater Basin.

Water System Water Quality Improvements

Project reduces reliance on the deep aquifer system where sea water intrusion threatens drinking water supply wells.

Adequate Water Supply

Project enhances available groundwater supplies with the added benefit of reducing dependency on the deeper aquifer, currently subject to increased sea water intrusion.

Diversify Supply (Use of Poor Quality Water)

Project incorporates a new water treatment technology to make use of poor quality water as a supplemental source of drinking water supply.

Groundwater Management – **Further Local Basin Management Objectives**

Project is implements the Public Draft of the *Basin Plan for the Los Osos Groundwater Basin*, (August 2013) as a means to reduce sea water intrusion into drinking water supply wells of LOCSD, Golden State Water Company, and S&T MWC.

Protect and Improve Groundwater Quality

Project extracts shallow groundwater high in nitrate concentrations and treats for potable water use, and reduces reliance on deep aquifer wells where sea water intrusion is a priority concern.

Water Resources Management – **Agency Alignment on Water Resources Efforts**

The Project is identified as part of a regional solution in the fair apportionment of the groundwater basin yield amongst three water districts, and private rural and agricultural well owners.

Secondary Objectives

The project furthers on-going efforts to collaborate with other water districts and private well owners in the best management practices for the basin. While the scale of the project is not significant in comparison to larger program implementation, it does represent multi-objective thresholds being sought for the region as a solution to contamination and sustainable yield. As a result, the project is considered to be an effort to maximizing available water supplies for public water systems, recognizing that the project is also one part of the Basin Plan's Water Reinvestment Program which includes additional objectives not listed above.

As one part of the Basin Plan's Water Reinvestment Program (i.e., returning recycled wastewater to the local hydrologic cycle), the Project enhances benefits of the existing Broderson recharge site where excess recycled water is permitted to leach into the shallow aquifer for extraction by the new shallow well (Project) down gradient.

(b) **Relate to WMS, RMS and Objectives**

SLO Recommended Project Elements are identified as follows:

DWR State Objectives	DWR RMS	SLO WMS	SLO Recommended Project Elements	IRWM Objectives
• Increase Water Supply • Improve Water Quality	• Drinking Water Treatment and Distribution • Pollution Prevention	• Water and Wastewater Treatment • Water Supply Reliability • Water Quality Protection and Improvement • Groundwater Management	• Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Develop new groundwater management projects to improve the quality and quantity of groundwater in accordance with a regional stakeholder-based groundwater basin plan.	• Maximize accessibility of Water • Water System Water Quality Improvements • Adequate Water Supply • Diversify Supply • Protect and Improve Groundwater Quality • Agency Alignment on Water Resources Efforts

(c) **Technical Feasibility and Justification**

The LOCSD receives its entire water supply from the Los Osos Groundwater Basin (Basin). The Basin has two distinct zones: Upper Aquifer and the Lower Aquifer. There are currently two separate, but highly intertwined problems with the Basin. The first issue is that the Lower Aquifer is experiencing increasing levels of seawater intrusion due to overdrafting of the Lower Aquifer. The second issue is that the Upper Aquifer is contaminated with nitrates above the drinking water standard.

The Lower Aquifer has been the District's, as well as the other two water purveyors', primary water supply source as the Upper Aquifer has been contaminated by nitrates. The Lower Aquifer is currently in overdraft and is experiencing seawater intrusion in the District's and other water purveyors' westernmost wells. Production from the District's largest and primary water supply, the Palisades Well, has been required to be reduced to minimize the impacts of seawater intrusion. Other wells within the District are being utilized instead of the Palisades Well, all of which have lower production rates, and subsequently the District is barely keeping up with current water demands. As a result, the District, Golden State Water Company, S&T Mutual Water Company, and the County of San Luis Obispo have formed the ISJ Working Group and have prepared a Groundwater Basin Management Plan (Basin Plan) to identify the means and methods on how to best manage the Basin and reduce or stop seawater intrusion altogether since the problem is Basin-wide, affecting all three water purveyors in the area. The Basin Plan has identified several projects with the main goal of shifting production easterly in the Basin and from the Lower to the Upper Aquifer. This project is one of the critical projects outlined in the Basin Plan that meets this main goal to help improve the management of the Los Osos Groundwater Basin.

Due to the high density of septic systems in the Los Osos Community, the Upper (shallow) Aquifer is contaminated with nitrates above the drinking water standards. The community has been subject to a building moratorium from the Regional Water Quality Control Board, Resolution 83-13 for the past 28 years. This order requires the community to develop a community wide centralized wastewater collection system and treatment plant, which is currently underway by the County of San Luis Obispo. The District, as well as the other two water purveyors within the community have under-utilized the Upper Aquifer because the water quality for nitrates does not meet current CDPH drinking water quality standards. Limited blending to reduce nitrate levels below drinking water standards has occurred in years past, but not to the degree that

such blending can augment existing water supplies sufficiently.

The County of San Luis Obispo, due to the two distinct water quality issues and the overdraft of the Lower Aquifer has placed the Los Osos Groundwater Basin in a Level Severity III Drought condition. As part of the Coastal Commission requirements for the Wastewater Project, the County and the water purveyors are required to identify solutions to the overdraft problem. In order for the Los Osos Groundwater Basin to be sustainable, the District must reduce its pumping from the Lower Aquifer and increase its pumping from the Upper Aquifer to meet existing demands. In order to increase production from the Upper Aquifer, the water is required to be treated to remove nitrates to the degree that the water supply meets drinking water standards. Therefore, the proposed project will meet the following goals of the groundwater Basin Plan:

- Increase production in the Upper Aquifer
- Supplement production in the Lower Aquifer to make up production lost from the District's main water supply, the Lower Aquifer Palisades Well
- Shift production from the west to the east, away from seawater intrusion

(d) **Benefit DACs**

No State certified DACs exist in the Los Osos Valley Groundwater Basin.

(e) **Environment Justice**

The water quality of water produced for this project (or the waste stream from treatment) will not degrade or impact low income areas in any way.

(f) **Cost and Financing**

Estimated capital cost is $935,000 with an estimated annual O&M cost of $85,000, and a projected life-cycle of the treatment plant, motors and pumps of 20 years.

(g) **Feasibility through Economic Analysis**

Of the DWR methods for quantifying benefits, method Section D3 – Monetized Benefits Analysis has been selected based on the grant amount and the ability to monetize the benefits in terms of an annual dollar value for each year of the project's operation. LOCSD benefits are to be expressed as the cost of water saved by not having to import water or construct a desalinization water treatment plant.

(h) **Project Readiness to Proceed**

This project has completed preliminary design and environmental review process has been started. The construction plans and specifications are expected to be completed by winter 2013, early spring 2014. Construction may start as soon after spring 2014. It is expected that CEQA compliance will include a mitigated negative declaration.

(i) **Strategic Implementation of the Plan and Project Merit**

This project serves as an example where groundwater basin cooperation amongst multiple users can lead to improving contaminated groundwater supplies for a higher beneficial use. As a new source of supply, the well provides for drought readiness and protection of the lower aquifer from sea water intrusion.

(j) **Climate Change Effects**

The project is not anticipated to significantly impact climate change in the region. As a drought readiness

supply, the impacts of climate change can be overcome if extended drought years occur in the future.

(k) **Reducing GHG compared to Project Alternatives**

Several projects have been suggested in the preliminary design process and through the ISJ Working Group Basin Plan process. In addition to demand reduction through conservation, alternatives include importing water from an outside source, or installing more expensive filtration treatment, such as desalinization. This project is less costly than importing water or installing a desalinization plant and requires less energy resulting in less GHG emissions. The County and members of the ISJ Working Group will be continuing efforts to increase the conservation program in conjunction with this project.

(l) **Project Sponsor to adopt IRWM Plan**

Yes.

(m) **Reduce Dependence on Delta Supplies**

The LOCSD does not use SWP water.

10.5.2 ***Impact and Benefit***

Discuss:

(n) **Potential Impacts and Benefits of Project Implementation**

Project will have a treatment and pumping energy cost at the new well site. Since the project anticipates reducing pumping from the deep aquifer, the net energy cost is likely a gain because of deeper water surface from deep aquifer well. However, added treatment is assumed to set the overall energy cost at zero.

The following impacts statement was developed From the Mitigated Negative Declaration Statement:

a. The project site is surrounded by a solid wood fence, and matured landscaping is located along the 8th Street street-side perimeter. Facilities within the site are partially visible above the landscaping and along El Moro Avenue. Visible components of the project would include a 600-square foot metal building and 5,000-gallon HDPE. While partially visible from 8th Street and El Moro Avenue, these structures would be consistent with existing development onsite, and would be primarily obscured by the existing fence and landscaping. Based on the proposed location of the project, proposed development would likely be consistent with the adjacent development and character of the area.

b. The proposed project would not introduce a new use, and would be consistent with existing uses.

c. The proposed use is consistent with the visual character of the immediate area.

d. The project does not include any new sources of light or glare

e. The project site is currently developed, and the proposed project would not affect any unique geological or physical features.

The project benefits include reduced reliance on the lower aquifer threatened by sea water intrusion and reduces the need to import costly water from outside the basin.

(o) **When a more Detailed Project-Specific Impact and Benefit Analysis will Occur**

Upon grant funding.

10.5.3 *Plan Performance and Monitoring*

(p) **What is Proposed Methods of Monitoring Project Performance**

10.5.4 *Financing Strategies*

What is the plan for implementation and financing of project and programs, including:

(q) **Known and Possible Funding Sources**

Funding will come from grant funding and LOCSD reserves for local cost share.

(r) **Funding Mechanisms, Including Water Rates, etc.**

LOCSD water rates and fees.

(s) **How O&M Costs for Projects will be Covered**

LOCSD water rates.

Project Code	Project Title	Project Cost	Question 1: Funding Source and % of Total Cost	Question 2: Certainty/Longevity	Question 3: O&M Finance Source
NCST_GWM1	8th Street Upper Aquifer Well and Nitrate Removal Facility	$500K-$1M	Los Osos CSD reserves and rates are sufficient to pay for all of the local cost share	In-kind labor from Los Osos CSD and reporting costs are fully funded; capital cost contributions are uncertain	Los Osos CSD can support project operations, maintenance, and replacement costs in perpetuity
			Grant Monies (Prop 84 (Groundwater), 3rd Round; WaterSMART Program; could apply towards recycling water grants)	None	

10.5.5 *Climate Change*

(t) **Process that Considers GHG Emissions when Choosing between Project Alternatives**

Yes.

Project 11. Los Padres CCC Center - Stormwater LID Treatment Project

11.1 Project Number: NCST_FLD1

11.2 Project Location: North Coast

11.3 Project Sponsor: Morro Bay Estuary Program

Morro Bay National Estuary Program

Source: Google Maps (sponsor to verify or provide image0

11.4 Project Summary:

The Los Padres Center Project represents a Low Impact Development (LID) implementation project at a scale and under ownership where research, education, and water resources management can take place concurrently within a self-contained ecosystem. While not a large project, the Los Padres Center Project does offer opportunities for land use agencies to see and understand the elements of LID

The area of land that will be benefitting from Stormwater LID Treatments belongs to the National Guard and are leased by the California Conservation Corps (CCC). The CCC - Los Padres Center is a residential center where approximately 80 corpsmember reside. Participants are 18-25 years old and sign up for 1 year to work on conservation projects that teach them skills and earn educational scholarships to help them be employable when they leave the CCC. The Center is located next to Chorro Creek and Poison Ivy Creek. By

implementing this project the corpsmembers will not only benefit by learning LID techniques, and the importance of water quality and water conservation but will also benefit by having a more livable area at the center that will thoroughly engage them in land stewardship that they will take with them when they move on. Chorro Creek and listed endangered species such as, steelhead and California red-legged frogs will benefit by a reduction in peak run-off that degrades water quality and quantity by creating detention basins keeping the water on the land longer before slowly discharging in Chorro Creek.

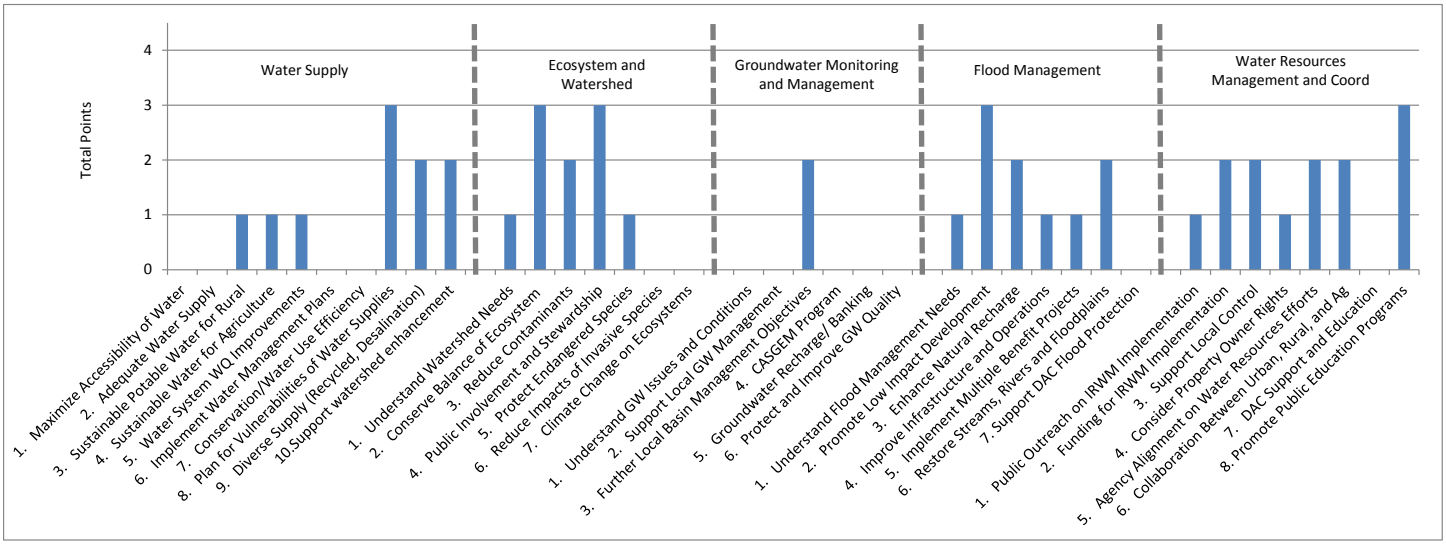
Morro Bay National Estuary Program brings together citizens, local governments, non-profits, agencies and landowners to protect and restore Morro Bay. This project is a collaboration with the CCC and the National Guard to implement a demonstration project that will target action items outlined in their Comprehensive Conservation Management Plan that provides guidance on recovery actions that will result in restoring and protecting the Bay by improving water quality, enhancing steelhead habitat, conserving water and providing natural environments for citizens to enjoy.

The CCC Stormwater LID Treatment project is an ambitious demonstration project which will focus on **eliminating flooding at CCC Buildings** while also **increasing groundwater infiltration and habitat restoration** by installing site specific topographical earthwork features. The project estimates that on-site earthwork and plumbing can mitigate over one million gallons of water on the project site while attenuating adjacent Chorro Creek storm surges through seven acres of habitat restoration. **By widespread land cover and shade tree installation** at 43% of the project site, groundwater recharge areas will be increased. Reducing energy costs and local water supply reserves, including recycled onsite water (greywater, rainwater, mechanical), will be utilized for irrigation and indoor non-potable water uses such as toilet flushing.

Two constructed wetlands will contribute to the largest reduction in the large storm event runoff, while greatly improving stormwater quality and potential for recreational activities such as birding and onsite watershed education. Over 9280 native and food bearing plants will be planted to cool buildings and reduce energy use while greatly improving the aesthetic and educational environment for the resident CCC corps members and nearby San Luis Obispo residents. Seven "living areas" will be installed through placement of plantings and earthworks to reduce off-site travel of CCC Corps members and increasing onsite recreational and learning opportunities.

This project aims to be a learning laboratory for the corps members and future watershed crews. The corps members will be active and included on the CCC Native Greenhouse onsite; installation of the earthworks: inclusion in the construction of infiltration basins and bioswales by directed CCC corps members; take a part in planting and maintenance of plants; and assist in plumbing irrigation of specific plants through recycled onsite waters (i.e., grey water and captured stormwater).

Available Source Documents: *County General Plan Conservation and Open Space Element*



11.5 IRWM Plan Section Information and Analysis:

11.5.1 *Project Solicitation and Ranking*

How does the project:

(a) **Contribute to Plan Objectives**

Project satisfies the following Objectives:

Water Supply – **Plan for Vulnerabilities of Supply**

LID projects are well suited for adapting to Climate Change where the uncertainties of temperature and rainfall can shift the hydrologic cycle in a region to a point where water resources can become scarce, in the case of drinking and irrigation water supplies, or in abundance with higher peak flood events.

Ecosystem – **Conserve Balance of Ecosystem**

Project strives to create a new ecosystem out of an area that is relatively barren and dry by keeping stormwater on-site, planting trees and shrubs, and creating recharge ponds and recirculating plumbing of grey water and stormwater irrigation.

Public Involvement and Stewardship

The Project is a good example where public and governmental agencies are combining their resources to manage lands for the purpose of learning more about what LID can offer the IRWM region.

Flood Management – **Promote Low Impact Development**

The Project is going to provide research and educational opportunities to promote LID in the IRWM region,

as well as internationally over the internet.

Water Resources Management – **Promote Public Education**

The Project stresses public education and plans to offer tours and access to research and monitoring reports and material.

Secondary Objectives

Because of the project is taking place at a relatively small scale, some of the larger scale benefits, such as flood control and groundwater recharge may be difficult to see or quantify in this project.

(b) **Relate to WMS, RMS and Objectives**

SLO Recommended Project Elements are identified as follows:

DWR State Objectives	DWR RMS	SLO WMS	SLO Recommended Project Elements	IRWM Objectives
• Increase Water Supply • Improve Water Quality	• Conjunctive Management and Groundwater Storage • Pollution Prevention	• Water and Wastewater Treatment • Water Supply Reliability • Groundwater Management	• Develop methods of adapting to Climate Change and other vulnerabilities to the region's water resources. • Create and Preserve natural ecosystems and protect endangered flora and fauna through Land Stewardship and Conservation Easement programs. • Develop and Improve methods of water reuse within a community. • Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater.	• Plan for Vulnerabilities of Supply • Conserve Balance of Ecosystem • Public Involvement and Stewardship • Promote Low Impact Development • Promote Public Education

(c) **Technical Feasibility and Justification**

The prominent needs and problems the project will address are water quality and water quantity. Stormwater run-off is the number one contributor to non-point source pollution. The project site has incredibly compacted terrain and hardscapes that contribute to accelerated run-off. Due to the proximity of Chorro Creek and the lack of pervious soils and topography, the run-off drains into the creek and contributes to channel bed and bank erosion and degrading water quality by both sedimentation and pollutants. Water quantity is affected by channel incision and the lack of infiltration in the landscape. The project intends on using 185,900 gallons of rainwater for non-potable indoor use, and outdoor irrigation and capturing approximately 247,840 cubic feet of stormwater. 167,000 gallons of greywater will be reused to offset the use of potable water.

The project will be used as a demonstration project to influence the community to adopt land use practices throughout the region, will incorporate educational signage, and will be an accessible demonstration site for

tours and interested parties with self-guided tours and recreational areas such as bird watching and "livable spaces".

(d) **Benefit DACs**

No DACs will benefit from this project.

(e) **Environment Justice**

Low income areas are not affected by project implementation.

(f) **Cost and Financing**

Total estimated project cost of $1,663,192 with an estimated $800,000 of labor costs (in-kind labor is anticipated by the CCC). The project is seeking grant funding for the project costs.

(g) **Feasibility through Economic Analysis**

Of the DWR methods for quantifying benefits, method Section D2 – Non-Monetized Benefits Analysis will likely be selected for the ecosystem and educational benefits. The ability to assign benefits is tied to the ability to educate the public in the use and benefits of LID construction and devices, and to creating an eco-friendly environment. The analysis will likely be a description of the public and environmental stewardship benefits resulting from the implementation.

(h) **Project Readiness to Proceed**

Upon funding in whole or in phases, the project can proceed.

(i) **Strategic Implementation of the Plan and Project Merit**

The underlying intent of the project to change from an existing land use which is not ecofriendly to one that is. This pushes the project to the forefront of climate change adaptation alternatives, more so than other projects with greater benefits in other water resources management categories.

(j) **Climate Change Effects**

Project is considered as an adaptive climate change project, providing alternatives to how to react to the potential negative effects of climate change.

(k) **Reducing GHG compared to Project Alternatives**

The project was selected because of the need and opportunity to improve permeabilty and reduce run-off and flooding from the landscape and the accessibility and willing ownership for a demonstration project. The project is considered as a low tech, high labor, high benefit project that was selected for these merits. The impacts on GHG should result in an overall reduction in GHG once plants mature and on-site construction is no longer taking place.

(l) **Project Sponsor to adopt IRWM Plan**

Yes.

(m) **Reduce Dependence on Delta Supplies**

Not Applicable.

11.5.2 ***Impact and Benefit***

Discuss:

(n) **Potential Impacts and Benefits of Project Implementation**

Given the current land use and soil conditions (i.e., the site is compacted bare landscape), the impacts would be minimal and temporary and would be self-mitigated. Project will result in a net decrease in pumping cost from anticipated groundwater recharge raising groundwater elevations. Project does not anticipate any long term increase in water demand. The first couple of years may require water to establish plants and to provide for construction related uses such as dust control, etc.

(o) **When a more Detailed Project-Specific Impact and Benefit Analysis will Occur**

As part of any grant application or funding opportunity, if required. The project is not anticipated to create any short-term (i.e., construction related activities will be mitigated through time of year construction and grading) or long term impacts.

11.5.3 ***Plan Performance and Monitoring***

(p) **What is Proposed Methods of Monitoring Project Performance**

Project performance is difficult to quantify in terms of some measurable improvement or benefit from a baseline value. Performance may be measured based on the population of flora and fauna species found on the site over a 10 year monitoring and reporting period. Public education events and tours can also be an indicator of performance.

11.5.4 ***Financing Strategies***

What is the plan for implementation and financing of project and programs including:

(q) **Known and Possible Funding Sources**

The project is seeking 100 percent funding from state and federal grant sources. The project could be broken down in Phases and funding could be sought for smaller amounts of funding from unidentified sources.

(r) **Funding Mechanisms, Including Water Rates, etc.**

(s) **How O&M Costs for Projects will be Covered**

Annual costs for O&M are planned to decrease significantly as planted flora becomes rooted and water infrastructure is operating in accordance with planned LID programs. This is a low tech, high labor, high benefit project that was selected for these merits. O&M will be covered through the volunteer labor of the CCC and additional public funding for replacement costs of facilities over time. The estimated annual O&M is expected to be high in the beginning to establish the planted ecosystem and decrease quickly over a 3 year period.

Year 1 - $562,000

Year 2 - $139,725

Year 3 - $60,790

Project Code	Project Title	Project Cost	Question 1: Funding Source and % of Total Cost	Question 2: Certainty/Longevity	Question 3: O&M Finance Source
NCST_FLD1	Los Padres CCC Center - Stormwater LID Treatment Project	$500K-$1M	Morro Bay National Estuary Program and CCC to provide in-kind labor services	In-kind labor from Morro Bay National Estuary Program and CCC include a portion of construction labor and reporting costs; capital cost contributions are uncertain	CCC will fund labor and seek outside support for replacement and/or improvement costs; routine maintenance is fully funded in perpetuity
			Grant Monies (Prop 84, 3rd Round, WaterSMART, Army Corps Wetlands Grant; CA State Parks Land and Water Conservation Fund)	None	

11.5.5 *Climate Change*

(t) **Process that Considers GHG Emissions when Choosing between Project Alternatives**

Not applicable to a net positive benefit project providing passive solar cooling, and the slight reduction in reliance on energy to transport state and local water sources (no pumping of water).

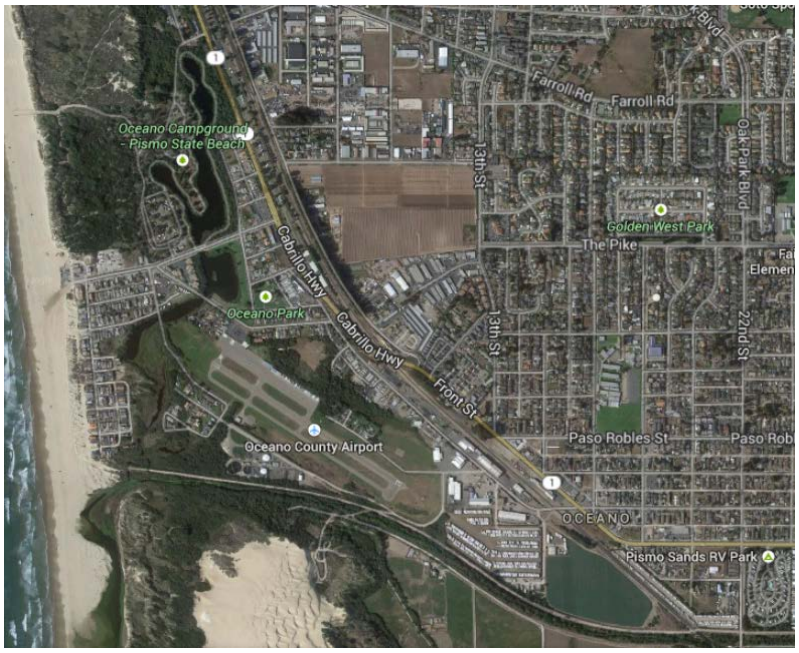
Project 12. Oceano Drainage Improvement Project - Hwy 1 & 13th Street

12.1 Project Number: SCNT_FLD2

12.2 Project Location: South County

12.3 Project Sponsor: County

County of San Luis Obispo, Department of Public Works



Source: Google Maps (sponsor to verify)

12.4 Project Summary: [what is size of pond? Is there retention and detention?]

The Project includes **construction of approximately 1,500 feet of storm drain pipe**, to convey drainage from the intersection of Highway 1 and 13th Street, and an outfall pond (sedimentation basin). The basin will **collect storm flows and allow debris and sediments to settle out prior to discharge** through the existing 36-inch culvert or a new box culvert located in the Arroyo Grande Creek levee. The project is located at the low point of an approximately 40.5 acre drainage shed area. The existing system is undersized for small storm events and as a result floods the Hwy 1 and 13th Street intersection and adjacent properties. The project will **reduce the frequency of drainage issues at Hwy 1 and 13th Street** by constructing drainage facilities that collect and convey flows to the Arroyo Grande Creek channel. The project will also **lessen flows to the Meadow Creek Lagoon area**, thereby_ helping to **mitigate the existing drainage issues for downstream residences, businesses and the South County Sanitation District facilities**.

The project will **reduce maintenance and storm related management of the surrounding area.** It will

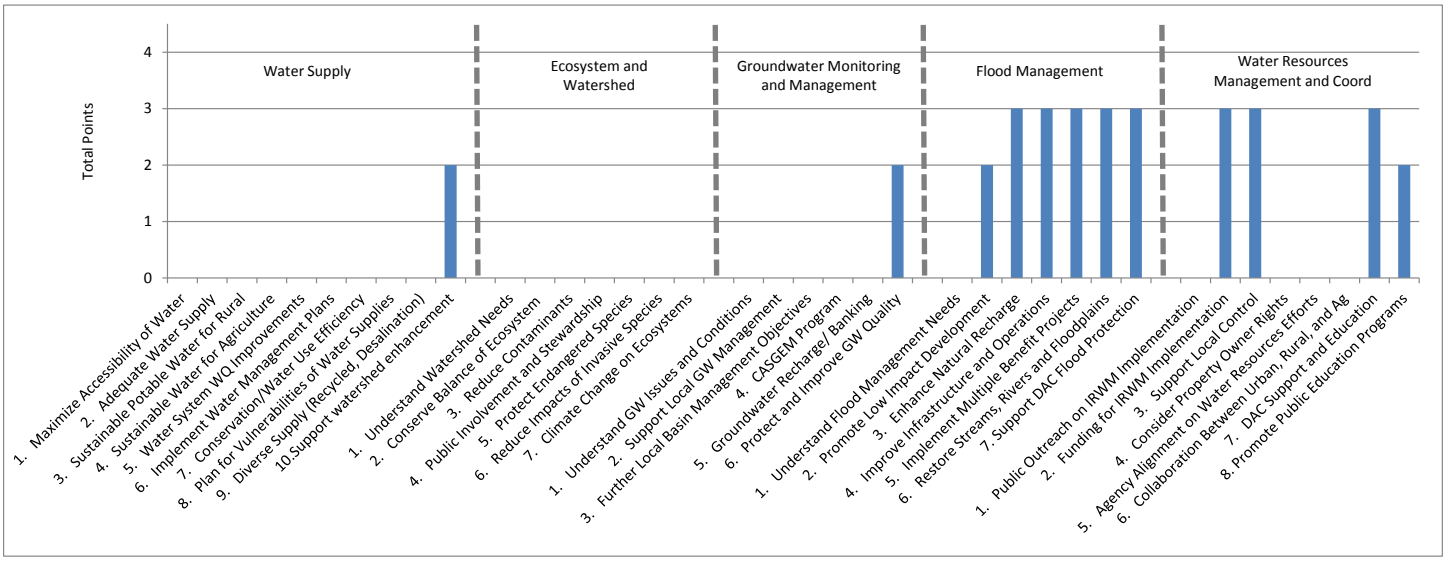
improve access and circulation on Hwy 1 and adjacent roadways as well as increasing the efficiency of road operations and improve emergency response times for the surrounding area.

Available Source Documents: *Oceano Revitalization Plan; Oceano Drainage Study*

12.5 IRWM Plan Section Information and Analysis:

12.5.1 *Project Solicitation and Ranking*

How does the project:



(a) **Contribute to Plan Objectives**

Project fully satisfies the following Objectives:

Flood Management – **Enhance Natural Recharge**

The infiltration devices included in the project will allow for natural groundwater recharge. The sediment basin will detain storm water during high flows and allow for a managed discharge into Arroyo Grande Creek and recharge within the LID basin.

Improve Infrastructure and Operations

The project will install flood control piping and infrastructure and reduce flooding along Hwy 1 & 13th Streets. The infrastructure is designed to a handle a 10-year event which provies greater protection that the current infrastructure which floods during less than a 2-year event typically. The project reduces flooding frequency, downstream flooding, improves water quality and reduces downstream sediment accumulation through installation of the project infrastructure (pipes, drain inlets with filter inserts and the sediment basin).

Implement Multiple Benefit Projects

The project combines needed flood protection with enhanced benefits of flood safety, attenuation, and reduction in non-point source discharges to Arroyo Grande Creek. Operations of the retention/detention basin with installed infiltration devices increases groundwater recharge.

Restore Streams, Rivers, and Floodplains

The project will maintain the natural river floodplain and ensure the health and safety of the traveling public by reducing the frequency and severity of flooding on Hwy 1 at 13th Street. The LID and infiltration devices incorporated into the project will also protect and enhance the Arroyo Grande Creek water shed and water quality.

Support DAC Flood Protection

Oceano is a DAC that will benefit from implementation of the Hwy 1 & 13th Street drainage project. Use of the IRWM grant funds provides an opportunity to support the community without unfairly burdening the businesses and residents.

Water Resources Management – **Funding for IRWM Implementation**

The project has achieved 80 percent funding through various grant programs, showing commitment to funding the project for its implementation in 2014. The remaining 20 percent is also to be met with grant funding.

Support Local Control

The County local Oceano community leaders are committed to the project's implementation. All efforts and decisions take place with full local support and outreach by the County.

DAC Support and Education

The program will create public education and outreach opportunities for the small DAC community of Oceano. The projects benefits and operations will be posted for review of status and operations, and to benefit other jurisdictions in the implementation of these kinds of multi-objective flood management projects.

Secondary Objectives

The LID elements of the project are limited to screening of stormwater and infiltration basins for groundwater recharge. With the intended purpose of project being flood control and stormwater management, the incidental benefits of LID devices are to be quantified, but not used for determining success of the project. Benefits to drinking water supplies or ecosystem will not be quantified. The project has an abundance of public visibility and education opportunities for the IRWM region overall, so certain LID elements could take hold in the community and grow over time. Improvements to drinking water supplies and environmental instream and ecosystem benefits can be achieved as well. Preparedness for changes in hydrology resulting from climate change is inherent in all flood management projects.

(b) **Relate to WMS, RMS and Objectives**

SLO Recommended Project Elements are identified as follows:

DWR State Objectives	DWR RMS	SLO WMS	SLO Recommended Project Elements	IRWM Objectives
• Improve Water Quality • Flood Management	• Pollution Prevention • Flood Management	• NPS Pollution Control • Flood Management	• Attenuate storm flows and improve stormwater quality by increasing on-site retention and detention controls. • Seek outside funding for water and flood control projects in low income areas. • Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater.	• Reduce Contaminants • Promote Low Impact Development • Funding for IRWM Implementation • Support Local Control • DAC Support and Education

(c) **Technical Feasibility and Justification**

The County Public Works Department and the District mission are to provide a Safe, Healthy and Liveable Community. The Oceano Drainage Project at Hwy 1 & 13th Street will achieve these mission elements by reducing flood occurrences along Highway 1 at the 13th Street intersection in Oceano. The reduction of flooding will improve traffic safety and emergency response times since the project will alleviate flooding conditions at the intersection of Hwy 1 and 13th Street in Oceano.

The total cost is estimated to be $2,699,000 with an estimated life cycle of 20+years. Project sponsor currently has 80% funding for the project and seeking remaining amount through grant funding.

(d) **Benefit DACs**

The project overall is providing flood control benefits to the community of Oceano, a DAC.

(e) **Environment Justice**

The project addresses known environmental justice issues, including CEQA and NEPA, through implementation of mitigation measures and permit conditions included within the project approvals.

(f) **Cost and Financing**

Total Capital Cost (including labor) - $2,699,000

Annual O&M - $5,000

(g) **Feasibility through Economic Analysis**

Of the DWR methods for quantifying benefits, method Section D2 – Non-Monetized Benefits Analysis will likely be selected for the flooding benefits. The ability to assign benefits is tied to the ability to specifically measure the frequency of flooding and related costs for road closures and maintenance to clean the roadways after waters have subsided. Sediment load reduction and groundwater recharge are also planned to occur through LID project implementation. Recharged groundwater can be credited as a supplemental water supply for the underlying groundwater basin.

(h) **Project Readiness to Proceed**

The project underwent a feasibility analysis and several alternatives were developed along with estimated costs. The alternatives underwent an internal review and an external review by Caltrans personnel (since they are providing some project funding). The preferred alternative was chosen because of constructability and ability to maintain the system.

A Mitigated Negative Declaration was prepared and approved for this project (pursuant to Public Resources Code Section 21000 et seq., and CA Code of Regulations Section 15000 et seq.). The SLO County Environmental Coordinator found that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by the project applicant. Mitigation measures were proposed to address potential impacts and are included as conditions of approval and/or as part of the project description. No significant and unavoidable impacts would result from the proposed project.

Elements of the project pending completion prior to construction include the purchase of the land easement, permitting, design document, and an addition 20 percent funding. Planned construction is to begin in mid-2014 and end in mid-2015.

(i) **Strategic Implementation of the Plan and Project Merit**

As a flood control project, the multiple objective benefits provide the best example of implementing larger Low Impact Development controls of sufficient scale to benefit a small watershed. The added benefits to low income areas prone to flooding create a synergy between regional and local needs by improving flooding on the highway and in the nearby neighborhoods, respectively.

(j) **Climate Change Effects**

Project has no effect on climate change and will improve the flexibility of the drainage system to changing hydrology where higher intensity storm events lead to increased peak flows.

(k) **Reducing GHG compared to Project Alternative**

No additional energy requirements are needed for project implementation.

(l) **Project Sponsor to adopt IRWM Plan**

Multiple sponsors...Community of Oceano (County) will adopt.

(m) **Reduce Dependence on Delta Supplies**

Not Applicable.

12.5.2 ***Impact and Benefit***

Discuss:

(n) **Potential Impacts and Benefits of Project Implementation**

The project will benefit roadways by reducing closures and increasing emergency response times during storm events. Incidental benefits included water quality improvements and increase groundwater recharge through infiltration devices and ponded water. Project will result in a net decrease in pumping cost from anticipated groundwater recharge raising groundwater elevations. Amount is unknown and likely to be

small. Project does not anticipate any long term increase in water demand or change in flood control pumping.

(o) **When a more Detailed Project-Specific Impact and Benefit Analysis will Occur**

The project has already undergone a rigorous alternatives analysis looking at impacts and benefits. A more in-depth project-specific analysis will occur if required as part of any grant funding.

12.5.3 *Plan Performance and Monitoring*

(p) **What is Proposed Methods of Monitoring Project Performance**

Demonstrating the degree of benefit can be accomplished by quantifying the amount of time Hwy 1 will be open during given storm events (post-project) as compared to the pre-project closure times for the same storm events. Water quality and groundwater benefits are difficult to capture and quantify pre and post project benefits.

12.5.4 *Financing Strategies*

What is the plan for implementation and financing of project and programs including:

(q) **Known and Possible Funding Sources**

Project funding sources for this project include: San Luis Obispo Council of Governments (Urban State Highway and Regional State Highway Accounts), State Department of Transportation (Caltrans) and Housing & Urban Development (CDBG Program). County, Caltrans and OCSD are also working together to improve the Oceano area by developing programs to construct curb, gutter and sidewalk improvements in a concerted and public driven pattern.

(r) **Funding Mechanisms, Including Water Rates, etc.**

Capital Costs have been secured through Caltrans Minor Project funding; San Luis Obispo Council of Government - Rural and Urban Highway Accounts; a 2011 Community Development Block Grant; County Road Funds and an FAA Airport Administration Grant.

(s) **How O&M Costs for Projects will be Covered**

San Luis Obispo County Public Works road maintenance funds.

Project Code	Project Title	Project Cost	Question 1: Funding Source and % of Total Cost	Question 2: Certainty/Longevity	Question 3: O&M Finance Source
SCNT_FLD2	Oceano Drainage Improvement Project - Hwy 1 & 13th Street	$1M-$5M	The County is supporting the community of Oceano, a DAC, in identifying and seeking funding sources for this project including: San Luis Obispo Council of Governments (Urban State Highway and Regional State Highway Accounts), State Department of Transportation (Caltrans) and Housing & Urban Development (CDBG Program)	Funding amounts are uncertain at this time	County and Caltrans will support long term maintenance of constructed drainage improvements
			Grant Monies (Prop 84/1E (Stormwater), 3rd Round)	None	

12.5.5 *Climate Change*

(t) **Process that Considers GHG Emissions when Choosing between Project Alternatives**

The chosen project provides the most cost-effective means of constructing and maintaining the proposed improvements. The proposed project is a gravity system which would require no on-going electrical source for operation purposes. The alternate projects would require an on-going electrical source in order to operate and maintain the inverted siphon.

Project 13. Lopez Water Treatment Plant Membrane Rack Addition

13.1 Project Number: SCNT_WMT1

13.2 Project Location: South County

13.3 Project Sponsor: District

San Luis Obispo County Flood Control and Water Conservation District

Source: Lopez Water Treatment Plan Evaluation Report (Kennedy Jenks, 2008)
http://www.slocountywater.org/site/Flood%20Control%20and%20Water%20Conservation%20District%20Zones/ZONE%203/Efficiency%20Assessment/pdf/Kennedy%20Jenks%20Lopez%20WTP%20Eval%20Final%20Report.pdf

13.4 Project Summary:

Five communities receive treated water from the Lopez WTP and are entitled to varying quantities of treated water. The percentage that each community is entitled to, and therefore, the degree of benefit is as follows: Arroyo Grande - 50%, Oceano - 7%, Grover Beach - 18%, Pismo Beach - 20%, and CSA 12 (Avila Beach) - 5%. The Lopez WTP is a membrane filtration plant designed to treat surface water from Lopez Lake, created by a dam built in 1969 along the Arroyo Grande watershed.

The Lopez Water Treatment Plant (WTP) Membrane Rack Addition **Project involves the construction of a new sixth membrane filtration rack**. Addition of the membrane filtration rack will increase the WTP's

filtration capacity enabling it to distribute **more water to Zone 3 Agencies (five communities)** and to provide **greater reliability**. Other capital projects are also on the planning horizon, such as installation of additional membrane filter modules. Though this project speaks to one specific capital project, the totality of capital projects will eventually realize greater system capacity and reliability, thus improving South County water resource management.

The current membrane filtration capacity of the Lopez WTP is not sufficient to provide Zone 3 communities with their peak demands with available surface water. Because of this capacity limitation, **these agencies pump groundwater, even when they have excess surface water entitlements and allocations** available to them. **Groundwater demands increase risk of saltwater intrusion and decrease availability of groundwater**. Groundwater quality is also not as good as treated Lopez water. This project would enable the Lopez WTP to provide enough treated water to meet peak demands, thus, reducing groundwater pumping and improving water quality.

The existing five membrane filter racks at the Lopez WTP require frequent and routine cleaning and maintenance, requiring certain racks to go 'off-line' for cleaning. Some cleaning requires two racks to be 'off-line' at the same time. During these types of cleaning and maintenance procedures, the Lopez WTP cannot produce peak contractual water allocation demands. The addition of an additional membrane filtration rack would allow cleaning and maintenance to occur while producing peak contractual water allocation demands.

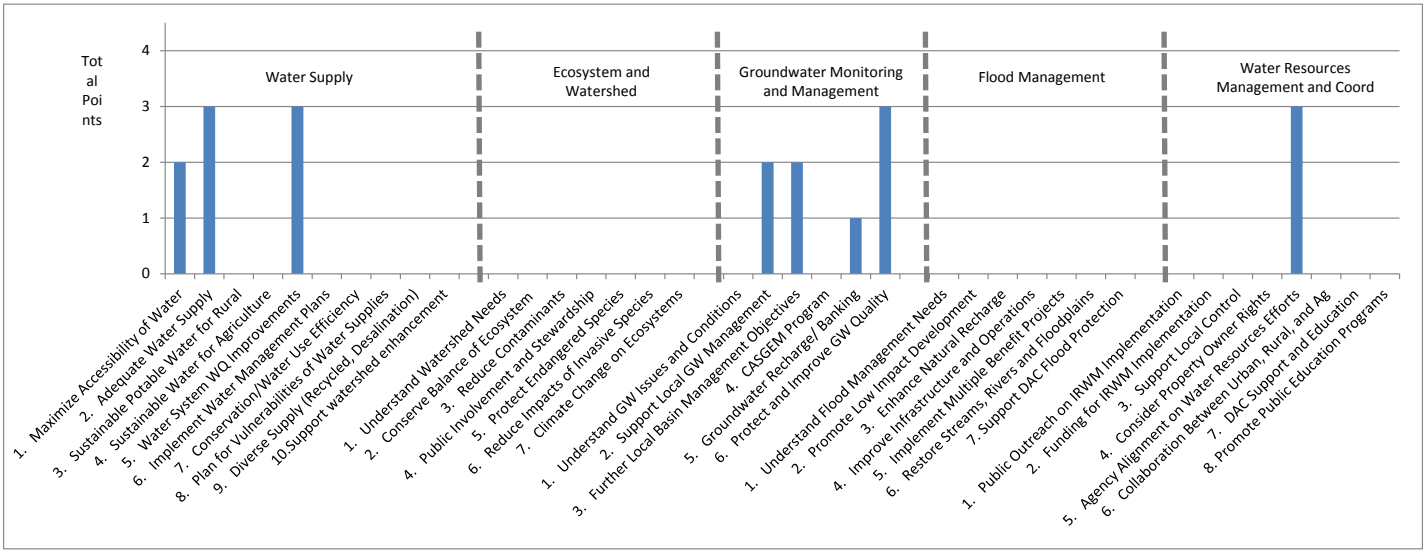
Operations and maintenance costs associated with the cost are estimated to be $7,000, annually. This cost includes additional operator time, chemicals used in cleaning, and electrical power.

Available Source Documents: *Zone 3 Urban Water Management Plan*

13.5 IRWM Plan Section Information and Analysis:

13.5.1 *Project Solicitation and Ranking*

How does the project:



(a) **Contribute to Plan Objectives**

Project satisfies the following Objectives:

Water Supply – **Adequate Water Supply**

Project enhances available surface water supplies to meet contractual obligations with the added benefit of reducing increased use of the deep aquifer system, currently threatened by sea water intrusion.

Water System Water Quality Improvements

Project reduces reliance on the deep aquifer system where sea water intrusion threatens drinking water supply wells.

Groundwater Management – **Protect and Improve Groundwater Quality**

Project reduces reliance on groundwater from deep aquifer wells where sea water intrusion is a priority concern.

Water Resources Management – **Agency Alignment on Water Resources Efforts**

The Project is identified as part of a regional solution in the fair apportionment of the groundwater basin yield and Lopez Lake contract amongst three water districts, and private rural and agricultural well owners.

Secondary Objectives

The project is a multiagency multi-benefit on many levels and makes the highest volume of supplemental water supplies (i.e., supplies other than groundwater) available at the time of year when the stress on the aquifer is at its highest in meeting public, private and agricultural demands. Achieving the best use of surface water operationally leads to assurances in meeting peak hour demands from customers and protecting groundwater from sea water intrusion. As one of five cities who benefit from this project, Oceano, a DAC, will benefit from this project to a low degree.

(b) **Relate to WMS, RMS and Objectives**

SLO Recommended Project Elements are identified as follows:

DWR State Objectives	DWR RMS	SLO WMS	SLO Recommended Project Elements	IRWM Objectives
• Increase Water Supply • Improve Water Quality	• Drinking Water Treatment and Distribution • Pollution Prevention	• Water and Wastewater Treatment • Water Supply Reliability • Water Quality Protection and Improvement • Groundwater Management	• Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Develop new groundwater management projects to improve the quality and quantity of groundwater in accordance with a regional stakeholder-based groundwater basin plan.	• Adequate Water Supply • Water System Water Quality Improvements • Protect and Improve Groundwater Quality • Agency Alignment on Water Resources Efforts

(c) **Technical Feasibility and Justification**

The project, as described, provides for the expansion of an existing surface water treatment plant where water supplies, inter-agency agreements, environmental clearance, land acquisition, permitting, and conveyance are in-place or already exist. The missing element of membrane capacity is a cost-effective method or increasing the use of available surface water supplies to fully optimize the existing conditions and reduce reliance on groundwater supplies identified as threatened by sea water intrusion.

The total cost is estimated at $650,000 with a projected 20 year lifecycle.

(d) **Benefit DACs**

The community of Oceano, a DAC, will benefit from this project by reduced risk to existing groundwater supplies from sea water intrusion, and improved redundancy during peak hour demand periods.

(e) **Environment Justice**

The project does not discriminate in any way against low income areas either in its construction, implementation and resulting water service.

(f) **Cost and Financing**

Cost is estimated as follows:

Capital Cost - $595,000

Labor Cost - $55,000

Annual O&M - $10,000

(g) **Feasibility through Economic Analysis**

Of the DWR methods for quantifying benefits, method Section D2 – Non-Monetized Benefits Analysis will likely be selected for the water supply quantity and quality benefits. The ability to assign benefits is tied to the ability to specifically measure the amount of supplemental water supply (supply other than groundwater) provided during peak hour conditions and year-round. Benefits will be quantified based on the cost of an imported supply such as SWP water or desalinization. Additional benefit can be attributed to the protection of groundwater supplies ensuring no loss of supplies occur. Long term O&M is expected with any water supply source added to the system.

(h) **Project Readiness to Proceed**

The project has gone through feasibility and preliminary design and is waiting for funding to begin design document. The sponsor currently has 30 percent funding to cover local match dollars. Project start date is June 2014 with end date of Jan 2015.

(i) **Strategic Implementation of the Plan and Project Merit**

The multi-objective elements of the water treatment plant expansion make this a good example where utility water system upgrades can serve existing demands with the ability to provide protection to existing

water supplies. Membrane treatment technology has become more popular since 2000 and can be constructed to reduce visual, sound and land use impacts.

(j) **Climate Change Effects**

The project's higher energy use is not anticipated to have climate change effects as a result of running additional membrane filters.

(k) **Reducing GHG compared to Project Alternatives**

No project alternatives were evaluated given the phased nature of the treatment plant.

(l) **Project Sponsor to adopt IRWM Plan**

Yes.

(m) **Reduce Dependence on Delta Supplies**

Yes, through reduced need for imported water supplies.

13.5.2 ***Impact and Benefit***

Discuss:

(n) **Potential Impacts and Benefits of Project Implementation**

Project is a Capital Project to expand an existing WTP at Lopez Lake. The project is expected to decrease the amount of groundwater pumping. The amount of reduced pumping costs in groundwater is assumed to offset the increase in treatment costs. The amount of additional water to be treated is not quantifiable until in operation.

The project is Categorically Exempt and was contemplated and accounted for in the initial construction design, permit and construction of the WTP facility. Preliminary design is complete. The project costs are included and accounted for in the County's 5-year budget. The construction of the project will be fully funded in FY 2014/15.

(o) **When a more Detailed Project-Specific Impact and Benefit Analysis will Occur**

A detailed analysis can be done if requested as part of grant funding.

13.5.3 ***Plan Performance and Monitoring***

(p) **What is Proposed Methods of Monitoring Project Performance**

Monitoring will be done through volumetric and rate of water treatment output during peak hour periods when filters are in a cleaning (or backwash) mode of operation.

13.5.4 ***Financing Strategies***

What is the plan for implementation and financing of project and programs, including:

(q) **Known and Possible Funding Sources**

County Flood Control Zone 3

(r) **Funding Mechanisms, Including Water Rates, etc.**

County Flood Control Zone 3 agency rates and fees, State and local Grant Funding

(s) **How O&M Costs for Projects will be Covered**

County Flood Control Zone 3 Agency rates

Project Code	Project Title	Project Cost	Question 1: Funding Source and % of Total Cost	Question 2: Certainty/Longevity	Question 3: O&M Finance Source
SCNT_WMT1	Lopez Water Treatment Plant Membrane Rack Addition	$500K-$1M	County Flood Control Zone 3 is responsible for funding capital projects (lake, WTP, and distribution system) through rates and fees to pay for local cost share and portion of capital costs to benefit five communities, one a DAC (Oceano 7%)	County Flood Control Zone 3 funding amounts will pay for local cost share and portion of capital funding	County Flood Control Zone 3, the operating entity of the Lopez WTP, can support project operations, maintenance, and replacement costs in perpetuity
			Grant Monies (Prop 84/1E (Drinking Water, Groundwater, Small Community Infrastructure), 3rd Round; WaterSMART)	None	

13.5.5 *Climate Change*

(t) **Process that Considers GHG Emissions when Choosing between Project Alternatives**

Project is considered to be the phased expansion of an existing project. Membrane plants do use a significant amount of energy, but the expansion is believed to be incrementally small in comparison to existing plant energy consumption.

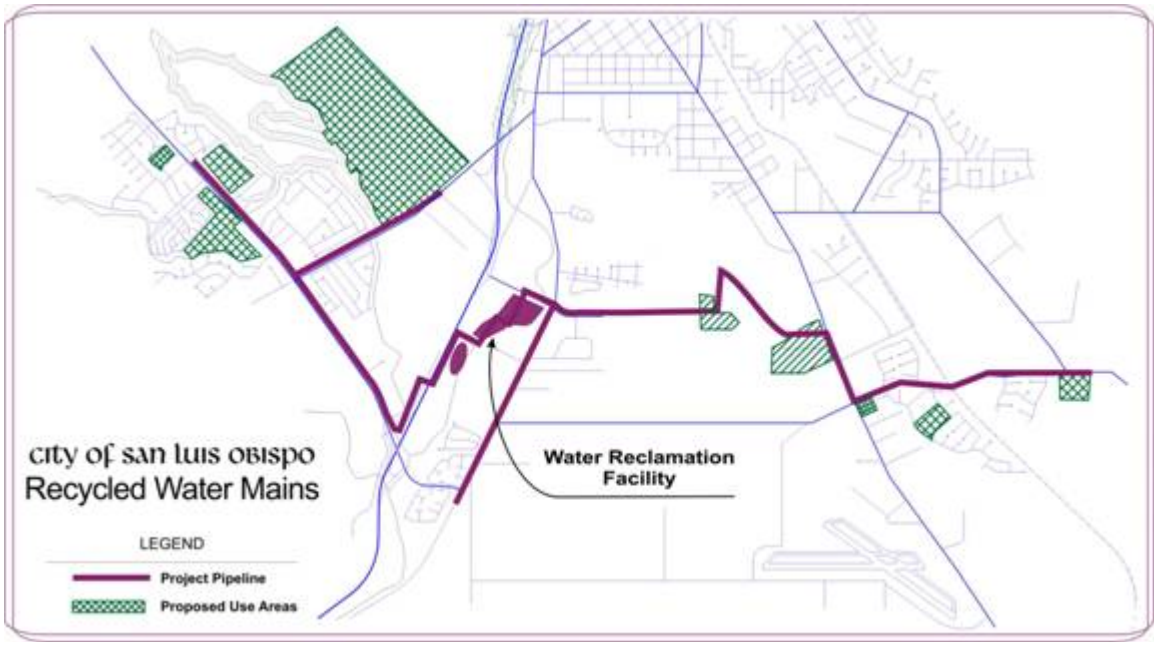
Project 14. Recycle Water Distribution System Expansion

14.1 Project Number: SCNT_WSP2

14.2 Project Location: South County

14.3 Project Sponsor: City of SLO

City of San Luis Obispo



Source: http://www.slocity.org/publicworks/recwater1.asp

14.4 Project Summary: [is groundwater a summer peaking supply or year round? What is cost to treat versus other supplies? Other Incentives to connect?]

The project proposes to **extend the City's recycled water distribution system** from the existing 14-inch ductile iron recycled water main on Madonna Road with **approximately 2,000 feet of new six-inch recycled water main** to serve CL Smith Elementary School. Recycled water mains would be installed along Oceannaire Drive, Lakeview Drive, and Balboa Street, to CL Smith Elementary school located at 1375 Balboa Street. A **new water service and water meter would be installed to serve the School's landscape**. Minor modifications would be made to the School's irrigation system **consistent with Title 22 requirements for signage and tagging of irrigation equipment**. CL Smith Elementary School will be served recycled water from the existing 600,000 gallon recycled water storage tank and pump station at the City's Water Reclamation Facility. The San Luis Coastal Unified School District's Grounds Maintenance personnel are trained in the use of recycled water as Laguna Middle School is currently served recycled water by the City.

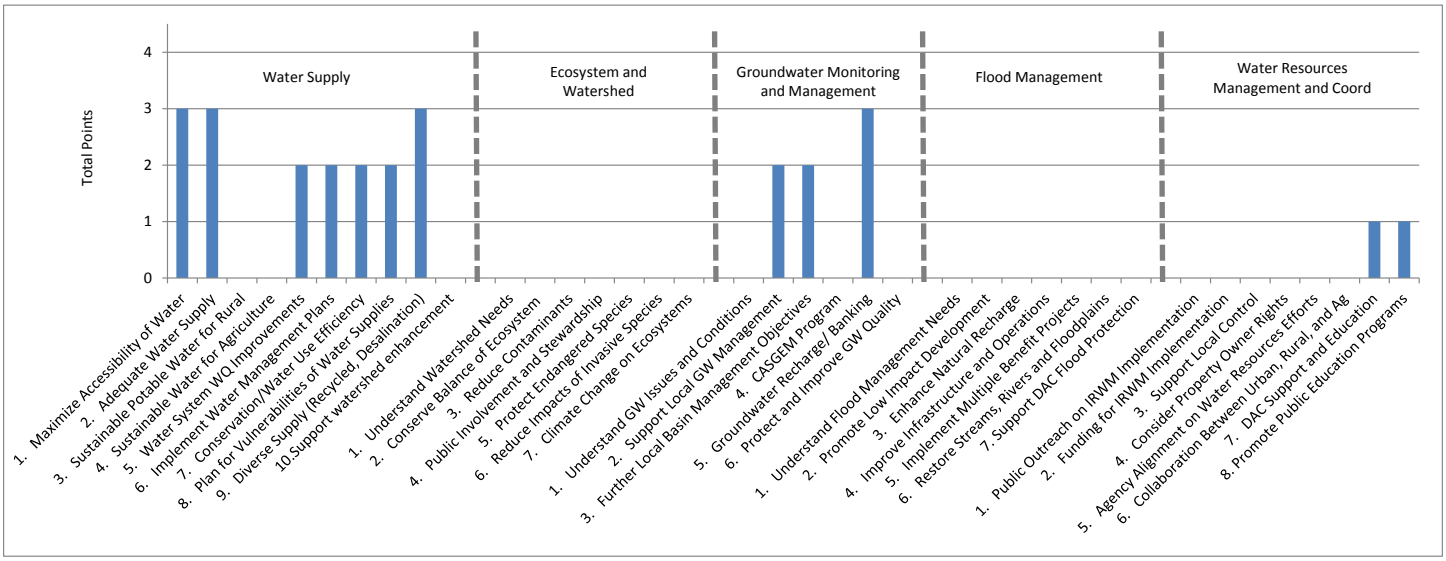
The City has been delivering recycled water for landscape irrigation purposes since 2006 when improvements at the City's Water Reclamation Facility were completed as well as the first eight miles of pipeline for the recycled water distribution system. Annual deliveries have increased from 77.17 acre feet in 2007 to over 170 acre feet in 2013 at parks, the middle school, golf course, sports fields, and other sites. The **City's goal is to deliver 1,000 acre feet per year of recycled water** through retrofitting existing irrigation systems and connections to serve new development in the City. Demand to provide recycled water for landscape irrigation exists proximate to the City's existing recycled water distribution system; however, extensions of the distribution system are needed to connect future customers. **CL Smith Elementary School was identified as a priority connection** as it is located proximate to an existing backbone recycled water main.

Available Source Documents: *City of San Luis Obispo Urban Water Management Plan; City of San Luis Obispo Annual Report on the General Plan*

14.5 IRWM Plan Section Information and Analysis:

14.5.1 *Project Solicitation and Ranking*

How does the project:



(a) **Contribute to Plan Objectives**

Project satisfies the following Objectives:

Water Supply – **Maximize Accessibility of Water**

Project implementation results in a higher beneficial use of treated wastewater with benefits of in-lieu recharge of groundwater for conjunctive use and drought protection.

Adequate Water Supply

Project provides new water to the City of San Luis Obispo, a DAC, and reduces reliance on constrained

groundwater supplies; especially, during the peak irrigation months.

Diversify Supply (Use of Recycled Water)

Project incorporates increased use of recycled water to supplement existing supplies of groundwater and surface water, and allows for further expansion in the future as a replacement supply for existing public outdoor irrigation demands.

Groundwater Management – **Groundwater Recharge/Banking**

With groundwater used predominantly as a peaking supply in high irrigation demand months, reduced use of groundwater through use of recycled water will provide for in-lieu recharge of the limited groundwater supplies to better provide for drought years when surface water supplies are constrained.

Secondary Objectives

With only 12 AFY of additional recycled water use, the scale of the project is not significant in comparison to larger recycled water projects; however, the project is a part of the City of San Luis Obispo's larger recycled water program and has multi-objective benefits to both reduced need for groundwater and surface water. Recharged groundwater provides better drought year protection and can help in adapting to climate change. From a public perception, recycled water has become better accepted and is typically seen as a prudent measure to ensure drinking water supplies and reduced rationing in dry and critical years. Decreased surface water from Whale Rock allows for exchanges with coastal communities where sea water intrusion is a critical concern (i.e., Public Review Draft of Los Osos Basin Plan, August 2013)

(b) **Relate to WMS, RMS and Objectives**

SLO Recommended Project Elements are identified as follows:

DWR State Objectives	DWR RMS	SLO WMS	SLO Recommended Project Elements	IRWM Objectives
• Increase Water Supply • Improve Water Quality	• Conjunctive Management and Groundwater Storage • Municipal Recycled Water • Matching Water Quality to Use	• Water Supply Reliability • Water Recycling • Conjunctive Use • Groundwater Management	• Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Develop new groundwater management projects to improve the quality and quantity of groundwater in accordance with a regional stakeholder-based groundwater basin plan.	• Maximize accessibility of Water • Water System Water Quality Improvements • Adequate Water Supply • Diversify Supply • Protect and Improve Groundwater Quality • Agency Alignment on Water Resources Efforts

(c) **Technical Feasibility and Justification**

The City has a multi-source water supply of which recycled water is one component. It is a goal of the City's General Plan Water and Wastewater Management Element to maximize the use of recycled water for approved uses, such as landscape irrigation. This project will result in the use of an additional 12 AFY of recycled water and provide opportunities for further expansion. Use of recycled water helps to conserve drinking water and promote sustainability by reducing the need to import water over long distances or pump the City's limited groundwater supply.

The City's 2004 Water Reuse Master Plan identifies the areas of the City to be served with recycled water, as well as potential customers and future recycled water demand. The Master Plan identified potential demand for 1,000 acre feet of recycled water as the distribution system expands. Since the completion of the Water Reuse Project in 2006, additional recycled water distribution pipelines have been installed as part of the City's Capital Improvement Program with new lines (or tie-ins) on Calle Joaquin (6" ductile iron pipe), Broad Street (10" ductile iron pipe), Madonna Road (4" ductile iron pipe), Capitolio Road (4" ductile iron pipe), South Higuera (12" HDPE and 10" ductile iron pipe), and Margarita (6" ductile iron pipe).

Demand to provide recycled water for landscape irrigation exists proximate to the City's existing recycled water distribution system; however, additional extensions of the distribution system can include future customers when they agree to switching over to less costly recycled water. CL Smith Elementary School was identified as a priority connection as it is located proximate to an existing backbone recycled water main. As an incentive for connection, recycled water is priced at 90% the cost of potable water. San Luis Coastal Unified School District is also an existing recycled water customer familiar with the Procedures for Recycled Water Use, caused this project to rank as the next extension to make to the recycled water system.

(d) **Benefit DACs**

The City of San Luis Obispo is listed by the state as a DAC.

(e) **Environment Justice**

The application of title 22 high quality recycled water does not create impacts or health concerns to low income areas. Benefits of the project are increased reliability in drinking water supplies during peak hour periods, and added drought year protection. The City's Recycled Water Program supports using the right quality of water for the highest beneficial use consistent with the State Resource Management Strategies.

(f) **Cost and Financing**

Estimated Capital Cost and Labor is estimated to be $400,000 with a projected 50-year lifecycle.

(g) **Feasibility through Economic Analysis**

Of the DWR methods for quantifying benefits, method Section D3 – Monetized Benefits Analysis has been selected based on the grant amount and the ability to monetize the benefits in terms of an annual dollar value for each year of the project's operation. The City's benefits are to be expressed as the cost of water saved by not having to import water.

(h) **Project Readiness to Proceed**

Upon funding, the City will complete land easements and design documents. Proposed project completion is estimated 2014/15.

(i) **Strategic Implementation of the Plan and Project Merit**

At its core, the project is a recycled water pipeline extension with the benefit of increased recycled water utilization in the City of San Luis Obispo, a state certified DAC. While the scale of the project is small, it falls under the umbrella of a City Water Reuse Plan. Further implementation of the plan over time attributes to reduced reliance on the constrained groundwater system, and less need for imported surface water supplies while matching water quality to use by putting highly treated wastewater to beneficial use. Secondary benefits can also be found in transferring surface water in wet/normal years to coastal communities where sea water intrusion is becoming critical.

(j) **Climate Change Effects**

The project does not contribute to or effect climate change. As a supplemental water supply, the project does offer climate change adaptation option.

(k) **Reducing GHG compared to Project Alternatives**

The use of the City's recycled water supply reduces the City's carbon footprint in that the distance recycled water is pumped from the Water Reclamation Facility requires less pumping than pumping surface water from one of the City's reservoirs (Whale Rock, Salinas, or Nacimiento), providing water treatment, and pumping to the City's potable water distribution system.

(l) **Project Sponsor to adopt IRWM Plan**

Yes.

(m) **Reduce Dependence on Delta Supplies**

The City does not use SWP.

14.5.2 ***Impact and Benefit***

Discuss:

(n) **Potential Impacts and Benefits of Project Implementation**

Project is a Capital Project to construct new recycled water conveyance facilities to increase recycled water use in the community. The anticipated increase in recycled water treatment and pumping is based on the projected build-out of the recycled WTP at 1,000 AFY with a 2013 demand of 170 AFY. The use of recycled water is intended to off-set groundwater pumping currently taking place. It is not certain if water intensive areas will be built as a result of recycled water being available. The assumption is that half of the recycled WTP's capacity will off-set existing groundwater pumping.

The project may result in short term impacts such as construction-related noise and traffic along Oceanaire, Lakeview and Balboa streets. The City's use of recycled water complies with NOAA NMFS requirements related to endangered species within the creek environment. As a condition of approval of the Water Reuse Project in 2005, the City is required to maintain a minimum average daily release, year-round, of treated effluent to San Luis Obispo Creek at a rate of 2.5 cubic feet per second (cfs), or 1.6129 million gallons per day (mgd) to provide satisfactory habitat and flow volume for anadromous fish species (steelhead trout) within the creek environment.

The project was determined to be Categorically Exempt from CEQA and a Notice of Exemption was prepared by the City's Community Development Department.

(o) **When a more Detailed Project-Specific Impact and Benefit Analysis will Occur**

Given the project inclusion in a much larger detailed Water Reuse Plan, no further analysis will occur.

14.5.3 *Plan Performance and Monitoring*

(p) **What is Proposed Methods of Monitoring Project Performance**

Monitoring will be based on the annual metered quantity of water provided to the CL Smith Elementary School.

14.5.4 *Financing Strategies*

What is the plan for implementation and financing of project and programs including:

(q) **Known and Possible Funding Sources**

The project will not have funding without a state or federal grant. Only priority projects replacing aged potable water infrastructure have access to the City's Water Fund at this time.

(r) **Funding Mechanisms, Including Water Rates, etc.**

State, federal, and local grant programs. No funding has been finalized to date.

(s) **How O&M Costs for Projects will be Covered**

The City's recycled water system O&M fund, covered by water rates, will pay for annual O&M costs.

Project Code	Project Title	Project Cost	Question 1: Funding Source and % of Total Cost	Question 2: Certainty/Longevity	Question 3: O&M Finance Source
SCNT_WSP2	Recycle Water Distribution System Expansion	$250K-$500K	The City of San Luis Obispo, a DAC, can support the local cost share and provide in-kind services	In-kind labor from the City of San Luis Obispo and reporting costs are fully funded	The City of San Luis Obispo operations fund can support project operations, maintenance, and replacement costs in perpetuity
			Grant Monies (Prop 84 (Groundwater), 3rd Round; WaterSMART Program; could apply towards several recycling water grants)	None	

14.5.5 *Climate Change*

(t) **Process that Considers GHG Emissions when Choosing between Project Alternatives**

While no specific GHG study is available, the energy to provide recycled water is considerable less than alternative supplies, such as importing supplies from Lake Nacimiento or pumping groundwater.

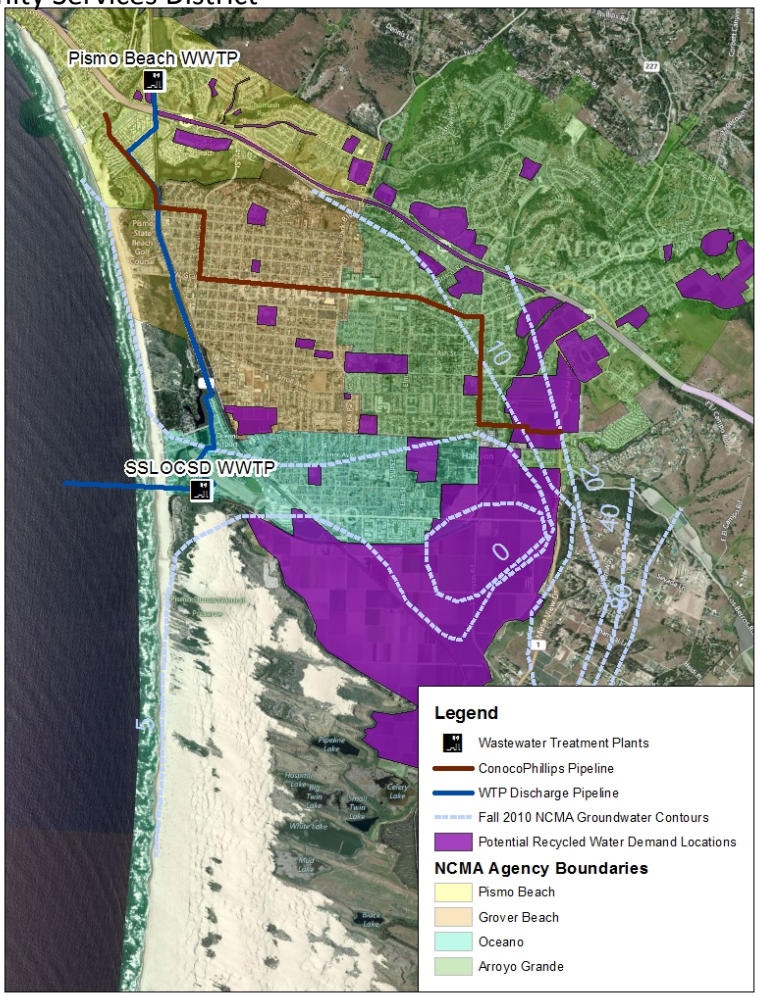
Project 15. Pismo Beach Recycled Water Treatment Plant

15.1 Project Number: SCNT_WSP4

15.2 Project Location: South County

15.3 Project Sponsors:

City of Pismo Beach including participation by the Cities of Arroyo Grande, Grover Beach and Pismo Beach and the Oceano Community Services District



Source: City of Pismo Beach

15.4 Project Summary:

The project includes the design and construction of a recycled water treatment and distribution system for the City of Pismo Beach (City). The project makes recycled water available for the City, and, in the future if excess recycled water is available, others in the South County Sub-Region. The project includes tertiary

treatment upgrades to the City's existing wastewater treatment plant (WWTP) facility and construction of a recycled water distribution system to deliver water to large public landscape irrigation customers. The first phase of the distribution system includes providing recycled water to Caltrans for irrigation along US 101. The City is partnering with adjacent agencies (i.e., implementation and financing) so, that in the future, a regional recycled water treatment program is possible in conjunction with the South San Luis Obispo County Sanitation District (SSLOCSD) to make additional recycled water available for the South County Sub-Region.

Possible future uses for recycled water include: groundwater recharge; agriculture irrigation; seawater intrusion barrier; stream flow augmentation; etc. The Project also addresses the need for increased supply reliability and drought preparedness by: 1) bringing a new water supply for beneficial use online, 2) improving operational flexibility and reliability of existing supplies, 3) creating a potential source of supply for groundwater storage projects, 4) maintaining and improving water quality of the groundwater basin through demand offset, 5) providing a potentially high quality supply source for augmenting environmental flows in local rivers and streams, 6) improving water-related needs of a DAC (i.e., Community of Oceano), and 7) implementing public education and outreach.

Available Source Documents: *City of Pismo Beach Water Reuse Study, May 2007, Carollo Engineers; Recycled Water Distribution System Conceptual Plan-City of Pismo Beach WWTP Technical Memorandum, June 2010, Wallace Group; 2010 Urban Water Management Plan-City of Pismo Beach; Spanish Springs Draft Specific Plan; Recycled Water Facilities Planning Study-State Water Resources Control Board Water Recycling Funding Program Grant; Pismo Beach Recycled Water System Conceptual Cost Estimate, June 2009, RRM Design Group*

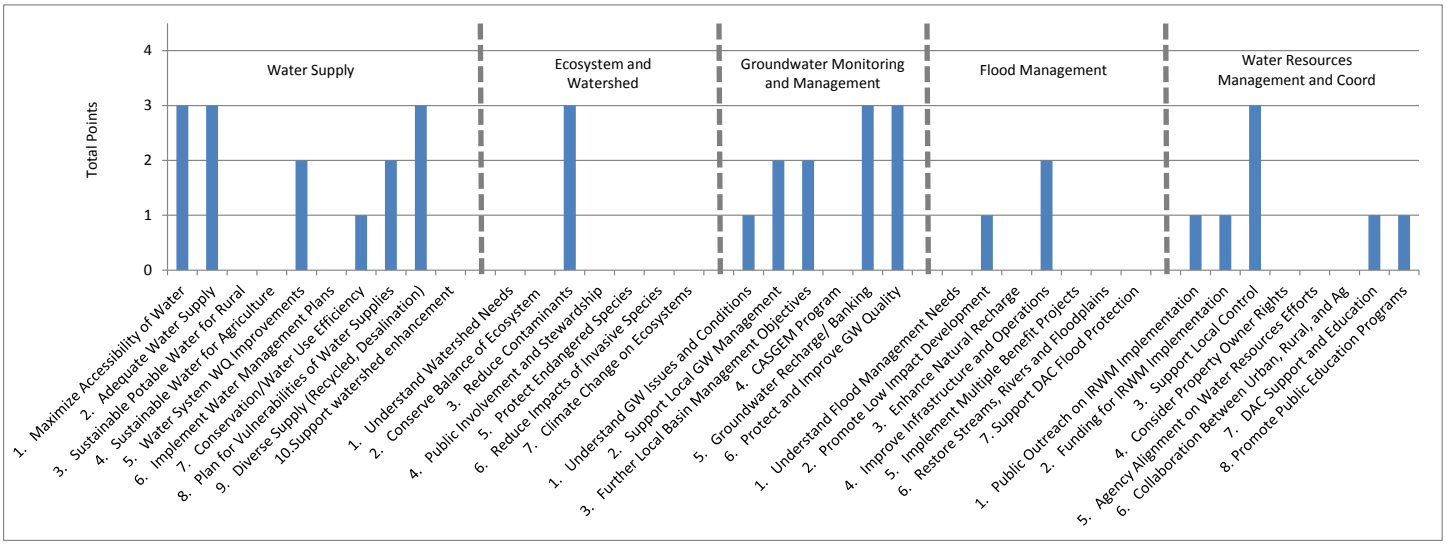
15.5 IRWM Plan Section Information and Analysis:

15.5.1 *Project Solicitation and Ranking*

How does the project:

(a) **Contribute to Plan Objectives**

Project satisfies the following Objectives:



Water Supply – **Maximize Accessibility of Water**

Project implementation results in a higher beneficial use for treated wastewater. Conservation and conjunctive use of drinking water supplies is achieved through replacing outdoor water supplies used for irrigation with a new recycled water source of supply.

Adequate Water Supply

With the offset in use of drinking water supplies for outdoor irrigation during the peak summer months, the City's current sources of drinking water (i.e., SWP and Lopez Reservoir) can be better managed for month to month and year to year allocations based on hydrologic conditions while protecting these sources of supply as a sustainable means of meeting existing demands and providing service for future growth.

Diversify supply (Recycled Water)

Project results in a large step toward maximized use of treated wastewater as a source for outdoor irrigation in the region, and for new developments planned to annex to the City of Pismo Beach.

Ecosystem – **Reduce Contaminants**

Project will reduce the volume (i.e., maximum allowable discharge is permitted by a Waste Discharge Permit) of treated water effluent (i.e., a point source of contaminants) from the City's WWTP outfall to the Pacific Ocean through creating an alternative method of treatment, and increasing water quality to potentially provide higher quality water for environmental benefits in fresh water streams and rivers.

Groundwater Management – **Groundwater Recharge/Banking**

The Project is a potential conjunctive use solution, by ultimately reducing groundwater pumped in the South County Sub-Region, creating a source of drought year supply for the Sub-Region when local surface water and SWP allocations are reduced.

Protect and Improve Groundwater Quality

Project reduces any reliance on groundwater supplies already impacted by salt water intrusion allowing for recharge of freshwater as a barrier for reducing and turning back the rate of movement of the salt water front.

Water Resources management – Support Local Control

The project has the political and financial support from multiple local agencies potentially benefitting from the introduction of the project's new source of water.

Secondary Objectives

The merits of the project as an educational tool and use as a model for similar small communities have the potential for long term benefits on a regional scale. The vision of recycled water use and planning already taking place for further expansions is a significant project feature.

(b) **Relate to WMS, RMS and Objectives**

SLO Recommended Project Elements are identified as follows:

DWR State Objectives	DWR RMS	SLO WMS	SLO Recommended Project Elements	IRWM Objectives
• Increase Water Supply • Improve Water Quality	• Conjunctive Management and Groundwater Storage • Municipal Recycled Water • Matching Water Quality to Use • Land Use Planning and Management	• Water and Wastewater Treatment • Water Supply Reliability • Water Recycling • Water and Wastewater Treatment • Conjunctive Use • Land Use Planning • Groundwater Management	• Develop and improve water and wastewater treatment facilities to reduce point source discharges of contaminants to natural streams. • Develop and Improve methods of water reuse within a community. • Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Seek outside funding for water and flood control projects in low income areas.	• Maximize accessibility of Water • Adequate Water Supply • Diversify Supply • Reduce Contaminants • Groundwater Recharge/Banking • Protect and Improve Groundwater Quality • Support Local Control

(c) **Technical Feasibility and Justification**

The City of Pismo Beach is currently processing a large new development application currently titled, the Spanish Springs Annexation. Should this development be approved, recycled water service can be implemented beyond the previously indicated existing locations to better serve proposed parks and golf courses. Additionally, the City's 2010 Urban Water Management Plan anticipates reuse as a component of the City's water conservation plan. Based on a 2007 Water Reuse study, the City's 2010 Urban Water Management Plan, a Water Supply Assessment for the proposed Spanish Springs development, and subsequent input from local stakeholders, additional evaluation became warranted to further develop the recycled water alternative.

The City identified several benefit areas for further study including evaluating use of recycled water for in-lieu recharge of the local groundwater basin, the creation of a seawater barrier to mitigate ongoing seawater intrusion, and the general reduction of dependency on imported State Water Project supplies by offsetting and optimizing existing potable water use supplies.

In 2012, the City obtained a grant through the State Water Resources Control Board (SWRCB) to better define the necessary recycled water infrastructure that may:

- Offset and optimize potable water uses,
- Recharge the groundwater basin,
- Create a seawater intrusion barrier, and
- Relieve increased water demand due to "reasonably foreseeable" large new development projects.

The projected supply from recycled water is anticipated to start at about 1,450 acre-feet per year (AFY)

in 2015, but will be based on treated wastewater volumes and potential WWTP upgrade capacities. Should the proposed Spanish Springs Annexation be approved, the City could simultaneously perform WWTP upgrades and begin installation of recycled water delivery lines to the development. Implementation of recycled water use in Spanish Springs could serve as a primary alternative irrigation water source during peak seasonal demand, and can offset potable water used for outdoor irrigation [will Spanish Springs include residential front yard landscaping as well?].

The Pismo Beach WWTP is owned and operated by the City. The WWTP receives wastewater from the City's wastewater collection system and serves a population of residential and commercial customers entirely within the City limits. In 2000, the City adopted its Wastewater Treatment Plan Master Plan (WWTP Master Plan), which proposed upgrades to increase treatment capacity and treatment level to provide advanced secondary, or tertiary, treatment.

The City's wastewater flows are currently approximately 1,200 AFY; the City would like to use all of its treated wastewater effluent for recycled water applications. Recycled water treatment and delivery will be managed by the City. It is expected that the City will treat wastewater effluent to all applicable Title 22 standards, based on intended application (i.e., matching quality to use). The current design flow capacity of the WWTP is 1.9 million gallons per day (MGD). The average flow observed in 2010 was 1.09 MGD, while peak hourly flows were typically between 3 MGD and 4.5 MGD. Maximum peak hourly flows in 2010 were observed at 7.29 MGD and 6.06 MGD in December and January, respectively.

Effluent from the WWTP is currently discharged through a shared outfall to the Pacific Ocean. The ocean outfall has a total capacity of 8.5 MGD, of which the City is entitled to 44 percent. The WWTP operates under Waste Discharge Requirements (WDR) Order No. R3-2004-0051. Among other water quality limitations, the WDR states that discharge to the ocean outfall from the City's WWTP is not to exceed a monthly average of 1.9 MGD.

(d) **Benefit DACs**

The community of Oceano is a DAC that will directly benefit in the future, but not with initial phase of implementation. Any secondary groundwater benefits and freeing up of additional local sources of water supply will benefit Oceano and other small adjacent communities.

(e) **Environment Justice**

The project does not impact low income areas or in any way degrade the quality of life in low income areas.

(f) **Cost and Financing**

The City has been very active in acquiring the needed funding to support the project phases including planning, environmental, design, and is now seeking funding through the implementation phase. Multiple funding sources, now or in the future, have been identified as coming from the Cities of Arroyo Grande, Grover Beach and Pismo Beach, and the Oceano Community Services District.

The City received a grant ($75,000) from the State Water Resources Control Board (SWRCB) from its Water Recycling Fund Program to complete a Water Facilities Planning Study. To meet the funding match requirement of the SWRCB grant ($75,000), the City is using a portion of the funds obtained from the sale of State Water Project water through DWR's 2013-14 Multi-Year Program. Funding for future phases of the

project is envisioned to include contributions from grant/low interest loan programs, benefiting rate payers, neighboring agencies and other sources.

The City does plan on submitting an application for Round 3 of the Proposition 84 State Grant. Absent this type of grant funding, the project will likely need to be deferred until funding is available.

(g) **Feasibility through Economic Analysis**

The project is technically feasible and multiple studies have been completed to determine this project as the most feasible alternative and the most cost-effective. In the 2007 Carollo study there were multiple concepts analyzed including each concept's cost effectiveness and relative cost per acre foot delivered.

(h) **Project Readiness to Proceed**

The current schedule, with anticipated outside funding, is set for June of 2015. The project is in the process of obtaining permits, CEQA compliance, financing, and preparation of design documents.

(i) **Strategic Implementation of the Plan and Project Merit**

The project's multiple objectives span several regional IRWM Goals and serves as a substantial project with large local South County Sub-Region stakeholder support. The project addresses future water supplies for new growth while educating developers, and the local agencies, of the true cost of water if economic growth is to take place along the coastal regions.

(j) **Climate Change Effects**

While increased energy can be attributed locally to the higher energy use in providing tertiary treatment, the net gain is anticipated to be small when considering the potential off-set of energy needed for SWP coming from Northern California and treated at the Coastal Branch (Polonio Pass) Water Treatment Plant, local surface water supplies coming from Lopez Lake and treated via high energy microfiltration, and the required pumping of groundwater for supplemental supplies in drought years and for peaking during the high demand summer months.

(k) **Reducing GHG compared to Project Alternatives**

The recycled water project has no comparative alternative with the same high degree of local and regional benefits. Recycled water use has been determined in other California coastal communities as the first level of bringing new sources of water supply, while desalinization of Ocean Water is the third and most costly in terms of energy consumption.

(l) **Project Sponsor to adopt IRWM Plan**

Yes.

(m) **Reduce Dependence on Delta Supplies**

The City does plan on reducing SWP supplies, yet will continue to participate in the on-going SWP 2013-14 Multi-year Program to sale unused water entitlement, currently offered by CDWR, to benefit the project.

15.5.2 ***Impact and Benefit***

Discuss:

(n) **Potential Impacts and Benefits of Project Implementation**

Project is a Capital Project to expand the City's existing WWTP. The project is expected to decrease the need

for drinking water based on existing service area demands for outdoor irrigation of public landscaped areas. The amount of reduced need for SWP and local surface water supplies is assumed to offset the increase in costs from the tertiary treatment process and separate "purple pipe" recycled water conveyance system. The amount of additional water supplies will vary by hydrologic year type, but is anticipated to be significant relative to existing demands. In addition, by reducing the peak hour demand in the drinking water supply system, future growth can occur without having to parallel or replace existing transmission mains.

Potential impacts included for CEQA review are: Transportation/Traffic (Less than Significant); Noise (Less Than Significant with Mitigation); Air Quality (Less Than Significant With Mitigation); Population/Housing (Less than Significant); Hillside Grading (Less than Significant with Mitigation); Public Services (Less than Significant with Mitigation); Utilities/ Service Systems (Less than Significant with Mitigation); Hydrology/ Water Quality (Less than Significant with Mitigation); Recreation (Less than Significant with Mitigation);etc.

(o) **When a more Detailed Project-Specific Impact and Benefit Analysis will Occur**

A detailed analysis can be done if requested as part of any grant funding.

15.5.3 ***Plan Performance and Monitoring***

(p) **What is Proposed Methods of Monitoring Project Performance**

Monitoring will be done through volumetric and rate of tertiary treated wastewater output during peak hour periods and over the year. Additionally, a percentage of the total potential water service area will be monitored to ensure any opportunities to extend the distribution system further to expand the service area.

15.5.4 ***Financing Strategies***

What is the plan for implementation and financing of project and programs including:

(q) **Known and Possible Funding Sources**

The total $4.7M estimated cost will be updated as part of the on-going Water Facilities Planning Study being completed under the SWRCB Grant. As described in sub-section (f) Cost and Financing above, a combination of local and state funding sources will be needed to implement the first phase of the project.

(r) **Funding Mechanisms, Including Water Rates, etc.**

Rates and fees will be used to the extent of the level of benefit to both existing and new customers.

(s) **How O&M Costs for Projects will be Covered**

The existing City O&M program for wastewater and water supplies covers costs associated with the tertiary treatment facilities and conveyance pipelines.

Project Code	Project Title	Project Cost	Question 1: Funding Source and % of Total Cost	Question 2: Certainty/Longevity	Question 3: O&M Finance Source
SCNT_WSP4	Pismo Beach Recycled Water Treatment Plant	>$5M	The City of Pismo Beach can support the local cost share and provide in-kind services	In-kind labor from the City of Pismo Beach and reporting costs are fully funded	The City of Pismo Beach operations fund can support project operations, maintenance, and replacement costs in perpetuity
			Grant Monies (Prop 84 (Groundwater), 3rd Round; WaterSMART Program; could apply towards several recycling water grants)	None	

15.5.5 *Climate Change*

(t) **Process that Considers GHG Emissions when Choosing between Project Alternatives**

No significant increase in energy consumption or GHG emissions will occur as part of this project. The Project would offset potable demands from the SWP, thereby reducing the GHG emissions embedded in the delivery of SWP water. The amount of reduced GHG emissions could be calculated based on reduced demands after implementation of the Project.

G-6 Project Selection Briefing Paper

A Briefing Report on the San Luis Obispo Integrated Regional Water Management (IRWM) Plan Project List Update & Project Highlights

PURPOSE

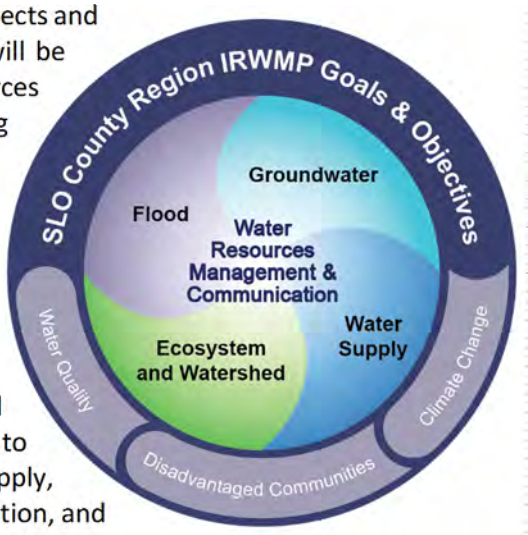
The purpose of this briefing report is to:

- Report on status of 2007 Integrated Regional Water Management (IRWM) Plan project list and/or seek input on each project's status and brief description
- Inform the region's stakeholders and project sponsors of the project selection results, including the results of the October 2013 RWMG Working Group integration workshop
- Solicit stakeholder and project sponsor comments regarding the content for either the final full and/or short project lists
- Solicit comments providing additional specificity and technical accuracy to the project descriptions and their impacts and benefits. *Note: Project Sponsors are currently reviewing a detailed report of the Project Short List for technical accuracy.*
- Provide a brief summary of how the final project short list (and its project "elements") help meet the Department of Water Resources (DWR) IRWM Guidelines

DWR has set a rigorous deadline for 2013 IRWM Plan completion. Thus our efforts are on a tight schedule, requiring comments on this report by **no later than 5:00 PM, November 26, 2013**. Please send comments to the PMT: Carolyn Berg (cberg@co.slo.ca.us) and Jon Goetz (jgoetz@geiconsultants.com). Within three (3) working days of receiving all comments, a brochure will be published to convey the final project list and the PMT will move forward with incorporation of the projects into the 2013 IRWM Plan sections.

INTRODUCTION

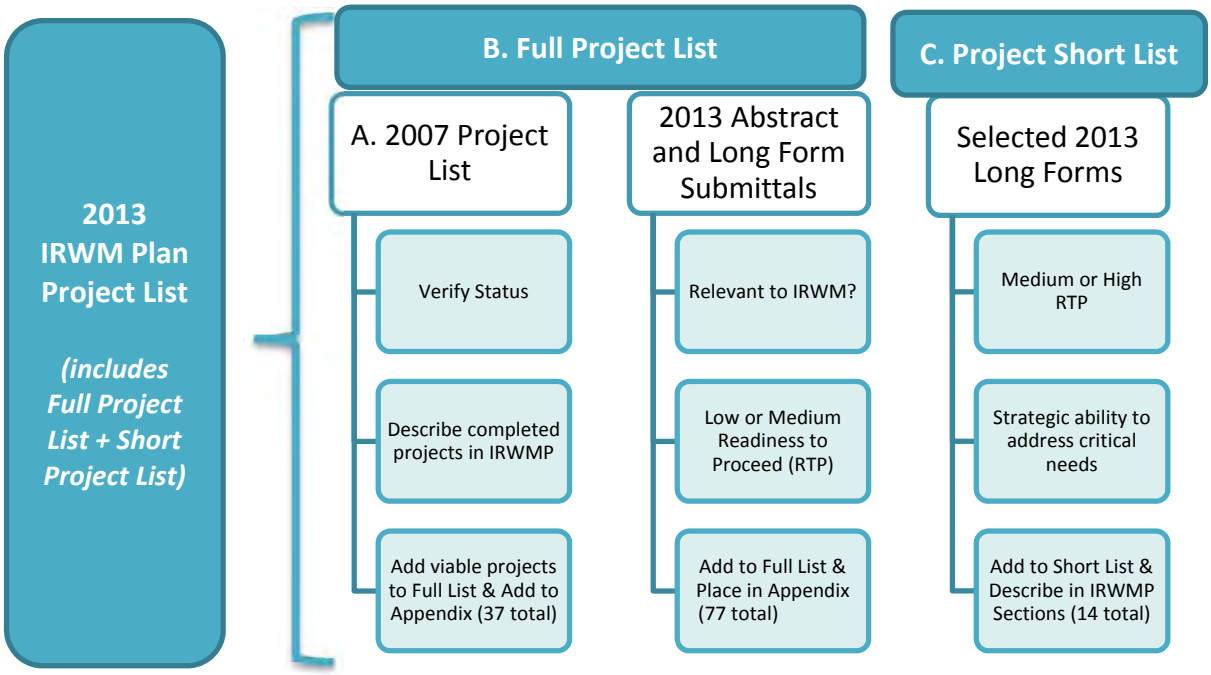
The San Luis Obispo County (SLO Co) IRWM Plan establishes goals related to water resources planning. The region's participants' and stakeholders' then implement projects and programs to achieve those goals. The IRWM Plan documents both completed and planned projects and programs, how those address goals, and specifically how each will be implemented. The IRWM Plan also maintains a list of water resources project/ planning concepts for stakeholders to consider over long term plan implementation.



SLO Co stakeholders have been actively engaged in the IRWM Plan update's project solicitation and review. From June to November 2013, the Project Management Team (PMT), under the direction of the Regional Water Management Group (RWMG), solicited water resources concepts and projects/programs from stakeholders. Agencies, organizations, and individual stakeholders submitted projects that would add value to SLO Co's integrated management of water resources: water supply, groundwater management, flood management, ecosystem restoration, and

general water resources management. As a result of this effort, 91 project[1] abstracts were submitted for PMT review.

The PMT reviewed and initially ranked these in accordance with the RWMG-approved project review guidelines (see IRWM website).[2] Some submittals were either not IRWM-related or were integrated into another project submittal. Of the 91 submittals, 77 were added to the Full Project List - 50 of those were classified as concepts[3], and 27 were classified as projects/programs. These projects have been added to the IRWM Plan Full Project List (see Section B), which also incorporates 37 concepts, programs and projects from the 2007 IRWM Plan.



These projects and the level of incorporation into the IRWM Plan are explained briefly below. This overview paper briefly describes the following:

A. 2007 IRWM Plan Project List
B. 2013 IRWM Plan Full Project List
C. 2013 IRWM Plan Short Project List
D. Next Steps
Attachment 1: Map of 2013 IRWM Plan Short Project List Locations
Attachment 2: 2013 IRWM Plan Short Project List: Summary of Project Elements

[1] Use of the term "project" in this report implies all three categories unless specifically called out as a project or program.

[2] <http://www.slocountywater.org/site/Frequent%20Downloads/Integrated%20Regional%20Water%20Management%20Plan/IRWM%20Plan%20Update%202014/>

[3] Concept refers to projects in the preliminary or planning stages. Projects/ programs have progressed beyond the preliminary planning stages.

A. 2007 IRWM PLAN PROJECT LIST

The 2007 IRWM Plan and related solicitations led to a list of concepts, projects and programs that aimed at addressing critical water resources needs. Over the past six years, some projects have been implemented, while others have remained as concepts or simply fell off of agencies' list. Based on a status review of each project, the projects' merits in meeting the updated Goals and Objectives, and the project sponsor's interest in pursuing the project, projects are being incorporated into the new project list. The intent is that projects remain on the IRWM Plan project list until they are built or an alternative project is submitted to fulfill the same, or similar, objectives.

The 2007 IRWM Plan project list (below) provides the full past project list and the current status of each. Certain projects have been completed or replaced by alternative solutions or change in water resources management priorities. Of these, 37 of the remaining projects have been added to the Full Project List (see Section B).

Definitions of the different status types are as follows:

Completed – Project has been completed or implemented.

Phased/ Ongoing – Generally refers to phased projects already underway and/or long term programs underway.

Full Project List – Project sponsor has submitted an updated project abstract for the 2013 IRWM Plan, or PMT judged the project and status as being viable for potential implementation.

2013 IRWM Project List – Project is included in the 2013 IRWM Plan Project List for incorporation into the plan sections.

Removed – Project has been removed from the IRWM Project list.

2007 IRWM Plan Project List and Status

Project Category and Title	2013 Project Status	Project Summary Statement
ECOSYSTEM RESTORATION		
Waterways Vegetation Management Program	Ongoing	Provides riparian vegetation, bank stabilization, and stream shading benefiting ecosystem restoration, water quality, flood protection, and aesthetics
Mined Lands Remediation Program	Ongoing	Supports Superfund National Priority Listing for and remediation of inactive/abandoned mining lands that adversely impact public health, water quality, and wildlife habitat.
Invasive Species Program	Ongoing	Provides opportunities for ecosystem preservation, public stewardship, natural resource conservation and integration into drainage improvement projects through utilization of native, drought tolerant plants and public outreach
ENVIRONMENTAL / HABITAT PROTECTION AND IMPROVEMENT		
Steelhead 4(d) Program	Ongoing	Develops and implements a Steelhead 4(d) program consistent with NMFS standards to improve water quality and fish and wildlife habitat.
Arroyo Grande Watershed HCP	Full Project List	Optimizes Lopez Lake Reservoir operations to balance retention of water for supply, release of water for ecosystem preservation, and riparian use.
Morro Bay Estuary Comprehensive Conservation and Management Plan	Completed (2013)	Implementation of these elements of the CCMP will protect, restore, and enhance the diverse habitats found in the estuary watershed and bay; promotes public awareness and involvement in estuarine management issues.
Attiyeh Ranch Conservation Easement Project	2013 IRWM Project	Acquire an 8,000+ acre conservation easement including 6 miles of the Nacimiento River and tributaries upstream of the lake; eliminates the development, subdivision potential, and land use intensification parcels.

Project Category and Title	2013 Project Status	Project Summary Statement
WATER SUPPLY RELIABILITY		
Nacimiento Water Project	Completed (2010)	45-mile long pipeline, 3 storage tanks, pump stations, and appurtenant facilities to convey raw water from Lake Nacimiento south to the communities of Paso Robles, Templeton, Atascadero, San Luis Obispo and Cayucos.
San Miguel CSD Water System Improvements	2013 IRWM Project	Provides a new welded steel water storage tank, new/ upgraded water transmission main and distribution mains to improve fire flow and service pressures and deliver drinking water meeting water quality standards
San Simeon CSD Water System Improvements	Full Project List	Replaces distribution piping and upsizes existing reservoir to provide adequate service pressures and fire protection under future conditions while increasing drinking water reliability and meeting water quality standards.
Lopez Water Treatment Plant Upgrade	Completed (2008)	Provides potable water supplies from the Lopez Lake reservoir to the communities of Arroyo Grande, Pismo Beach, Grover Beach, Oceano and the Avila vicinity via the Lopez Water Treatment Plant
Templeton CSD Water System Improvements	2013 IRWM Project	Installs and equips a new water supply well that draws from the Salinas River sub-flow and transmission piping under the railroad right of way for conveyance of water to the community distribution system
Cambria CSD Water System Improvements	Full Project List	Modifies their well system to mitigate contamination in their groundwater supply and meet drinking water standards, and upgrading their piping and storage facilities improve the reliability of their water supply to customers
County Service Area 23 (CSA 23) State Water Project Tie-In (Santa Margarita)	Full Project List	Construction of a State Water Pipeline (SWP) turnout and the approximately 65 feet of pipeline to the community of Santa Margarita. Provide a physical connection to CSA 23 for use during a drought or other water emergency.
Interlake Tunnel Project	Full Project List	Build tunnel between Lakes Nacimiento and San Antonio to allow the capture of watershed runoff (avoids release of thousands of AF of water released for flood control). Provides strategic release for downstream drinking/ groundwater recharge, seawater intrusion abatement, etc.
Design for the Installation of an Inflatable Rubber Dam Spillway Gate at Lopez Dam	Full Project List	Design and construction of an inflatable rubber dam spillway gate or a permanent spillway raise at the Lopez dam to raise the height of the dam, expand storage capacity and increase the safe yield of the Lopez Reservoir.
Heritage Ranch Emergency/Drought Water Supply Project	Removed; Replaced by 2013 submittal	Provide an emergency turnout from the Nacimiento pipeline which allows HRCSD to receive raw lake water for its water treatment plant, during extreme drought conditions when the Nacimiento Lake level is at dead pool elevation.
FLOOD MANAGEMENT		
Flood Control Zone 1/1A Waterway Management Program	Ongoing	Partially funded by Prop 84 Implementation grant. Increase the capacity of the leveed lower three miles of Arroyo Grande Creek while enhancing water quality and sensitive species habitat. Actions include raising levees, managing in-channel vegetation and reducing/managing sediment deposition.
Flood Control Zone 9 Waterway Management Program	Complete (2003)	Conduct an evaluation of the Edna Valley Groundwater Basin in order to establish its condition in terms of safe yield, hydrogeologic characteristics, overlying use, water quality and projected future use.
Federal Flood Insurance Program Compliance Study	Full Project List	Conduct a study to review how the region conforms to the Federal National Flood Insurance Program – determine the root cause of flooding problems, develop requirements for adequate creek setbacks, etc.
Flood Management Plan	Completed (2008)	Developed as a guide to implementing flood control projects; identify significant constraints affecting the ability to implement flood control projects and strategies to address the challenges.
Oceano Drainage Improvement Project – Hwy 1 & 13th Street	2013 IRWM Project	Construction of storm drain pipe, to convey drainage from the intersection of Highway 1 and 13th Street, and an outfall pond (sedimentation basin). Collects storm flows and allow debris/sediments settlement.
GROUNDWATER MANAGEMENT		
Nipomo CSD Salt Management Program	Full Project List	SNMP including strategies for managing water supplies to reduce salt input and identifies sources of salt in their wastewater collection system while implementing a pre-treatment program for non-residential dischargers.

Project Category and Title	2013 Project Status	Project Summary Statement
Los Osos Water System Improvements	2013 IRWM Project	Implements the following water system improvement projects, as identified in their Groundwater Management Plan and Water System Master Plan, to manage their groundwater supply and increase supply reliability and quality
Chorro and Morro Groundwater Basin Management Plans	Ongoing	Develops a resource and groundwater management plan for the Chorro and Morro Groundwater basins, including development of strategies to improve the watershed flow quantity and quality, and stream flows and underflows.
Edna Valley Groundwater Basin Study	Full Project List	Conducts an evaluation of the Edna Valley Groundwater Basin to establish its condition in terms of safe yield, hydrogeologic characteristics, overlying use, water quality and projected future use.
Groundwater Management Ordinance Study	Removed	Evaluates the feasibility of implementing a groundwater management ordinance by exploring terms of existing ordinances in other regions, local adjudication requirements and groundwater management plans or efforts, etc.
Development of a Groundwater Model and Activities within Santa Maria Valley Groundwater Basin	Phased; Characterization Study Underway (2013/14)	Study underway to conduct critical groundwater basin characterization activities in the Santa Maria Groundwater Basin (SMGB) to support development of a groundwater model and SNMP.
Paso Robles Groundwater Basin Model Update and Analysis of Potential Solutions	Completed (2013/14)	The District, in collaboration with the Paso Robles Groundwater Basin Steering Committee, will lead the effort to update the Paso Robles Groundwater Basin model (based on 1981 – 1997 data) to include data through 2011.
Paso Robles Groundwater Basin Salt and Nutrient Management Plan	Completed (2013/14)	Develop a complete SNMP for the Paso Robles Groundwater Basin to serve as model for the SLO Region and develop salt and nutrient management planning recommendations based on lessons learned and feedback from the RWQCB.
Development of Basic Salt & Nutrient Management Plans	Phased; Prioritization of basins study underway (2013/14)	Organized management of basins varies widely and there is a general lack of awareness of the RWQCB Recycled Water Policy (RWP). Identify the basin study areas where SNMPs are needed in the region, relevant stakeholders, etc
Upgrade of Water and Wastewater Systems, Operations, and Maintenance	Removed, Incorporated in other planning studies	Community-specific. Planning/ upgrade of systems, operations, & maintenance to decrease pumping of groundwater and establish a sustainable water system/portfolio. Elements covered by Groundwater Management Plan efforts.
Pilot Project Impact of Santa Margarita Lake Discharges on Groundwater Basin	Removed; Incorporated into other Project List submittals	NEED DESCRIPTION
RECREATION AND PUBLIC ACCESS		
Morro Bay Harborwalk	Completed (2010)	Constructs multimodal transportation improvements including enhancement and rehabilitation of 5 acres of coastal dunes, non-native species abatement, native restoration and storm water management.
STORMWATER CAPTURE AND MANAGEMENT		
Cambria Flood Control Project	Completed (2011)	Constructs a pressure storm drain system and pump station with an overflow bypass structure to alleviate flooding in Cambria, includes Santa Rosa Creek ecosystem enhancement and improved stormwater quality.
San Miguel Flood Control Project	Full Project List	Two phase implementation (by downstream and upstream) to collect and convey Salinas River 5unoff, includes a system of curbs, gutters, drop-inlets, constructed ditches, and underground storm drainage pipes.
Los Osos Community Stormwater Master Plan	Ongoing	Community-specific; anticipated to be done in conjunction with LOWWTP; there may be elements covered by consolidated watershed planning component.
WATER CONSERVATION		
Conservation and Open Space Element	Completed (2010)	Develop a comprehensive conservation element covering agricultural resources, air quality, biological resources, cultural resources, energy resources, mineral resources, open space resources, soils, visual resources and water resources.
Water Conservation and Erosion Control Education for SLO Co Vineyard Owners	Removed; Incorporated into other Project List submittals	NEED DESCRIPTION. Considered a project/design application. Suggest holding for implementation project solicitation process.

Project Category and Title	2013 Project Status	Project Summary Statement
WATER QUALITY PROTECTION AND IMPROVEMENT		
Atascadero Wastewater System Upgrade	Completed (YEAR)	Upgrades their wastewater treatment plant to ensure compliance with waste discharge requirements and construct new gravity pipeline to to improve water quality of water discharged back into Atascadero sub-basin
Avila Beach Wastewater System Upgrade	Unknown	Updates their wastewater treatment plant to ensure compliance with waste discharge requirements; improves the quality of the water before it is discharged into San Luis Creek and the ocean
California Men's Colony Wastewater System Upgrade	Completed (YEAR)	Upgrades the wastewater treatment plant to comply with waste discharge requirements and correct inflow/ infiltration problems that lead to treatment plant overflows. Enhance creek ecosystem and protect groundwater quality.
San Miguelito Wastewater System Upgrade	Unknown	Upgrades will potentially accommodate other local entities. Ensure compliance with waste discharge requirements. Improve effluent quality thereby improving source water quality and supporting the implementation of TMDLs.
Pismo Beach Wastewater System Upgrade	Completed (2006)	Upgrades wastewater treatment plant to comply with waste discharge requirements and correct capacity problems that lead to treatment plant overflows. Protect environment, support TMDL and stormwater programs, etc
Copper Piping Impact Study	Removed	Reviews impacts of copper piping in water distribution systems to implement policy to prevent negative impacts on drinking water supply and impacts on source water and the environment resulting from poor effluent quality.
Landfill Regulation Compliance Study	Removed	Reviews impacts of landfill operations on source water quality and ecosystems by documenting how they address TMDL and stormwater programs in complying with waste discharge requirements.
WATER RECYCLING		
San Simeon Wastewater Treatment Facility Upgrade	Completed (YEAR)	Upgrades existing wastewater treatment plant to from secondary to tertiary treatment (approved SEP) and will improve effluent quality. It will formally permit riprap armament and may include installation of seawall.
Morro Bay Wastewater Treatment Facility Upgrade	Completed (YEAR)	Upgrades to tertiary treatment; will provide increased treatment efficiency along with rehabilitation and modernization of the existing plant infrastructure as recommended by the RWQCB
Southland Wastewater Treatment Facility Upgrade	Completed (YEAR)	Retrofits an existing aerated lagoon wastewater treatment facility with wave oxidation technology to reduce nitrate discharge, installing headworks to screen out grit, and adds tertiary treatment to allow for recycled water use.
San Luis Obispo Reclamation Facility Upgrade	Completed (YEAR); Expanded distribution included as 2013 IRWM Project	Upgrading and adding various processes to increase capacity and to improve reliability and operational efficiency of the City's reclamation facility. Phase 2: add processes and equipment to remove nitrates from the treatment plant effluent and improve water quality.
South San Luis Obispo County Sanitation District Facility Upgrade	Covered by Regional RWSP (2013/14)	Upgrading its regional wastewater treatment plant to both meet waste and discharge requirements and allow for recycled water use in projects such a ecosystem enhancement and groundwater management. This meets implementation of inter-agency projects objectives.
Paso Robles Reclamation and Recharge Program	Ongoing; Construction underway	The wastewater treatment plant will be upgraded to tertiary treatment so the effluent can potentially be used for recharge, banking, irrigation, and/or ecosystem enhancement applications. Allow greater supply flexibility.
Recycled Water Master Plan Update	Full Project List	The City of SLO Recycled Water Master Plan Update will guide the expansion of the recycled water distribution system to serve users and maximize the use of available recycled water supply, thereby offsetting the use of potable water.
CSA 16 (Shandon) Water Reliability Project	Full Project List	Construct turnout facilities to connect the Coastal Branch of the State Water Project to the CSA 16 (Shandon) water distribution system.
Nipomo Area Water Reuse Plan	Unknown	Considered planning application; considered community-specific (Nipomo Mesa area of Santa Maria basin), but would work well in a collaborative recycled water planning proposal with a regional-scope.

Project Category and Title	2013 Project Status	Project Summary Statement
Supplemental Recycled Water Feasibility Study	Covered by Regional RWSP (2013/14)	The following agencies are investigating the feasibility of implementing recycled water programs within their service areas: Templeton Community Services District (TCSD), City of Morro Bay, City of Pismo Beach, South San Luis Obispo County Sanitation District (SSLOCSD), and Nipomo Community Services District (NCSD) via this Regional Recycled Water Strategic Plan (RWSP).
Preparation of a Recycled Water System Facilities Plan for the City of Pismo Beach	Covered by Regional RWSP (2013/14)	Covered by Supplemental RWSP study underway.
City of Morro Bay and Cayucos Community Services District (MBCSD) Recycled Water Master Plan.	Covered by Regional RWSP (2013/14)	Covered by Supplemental RWSP study underway.
San Simeon Small Scale Recycled Water Project	Full Project List	Title 22 Water available for distribution to offset potable water used for irrigation and hotel laundry use.
WETLANDS ENHANCEMENT AND CREATION		
Wetland and Vernal Pool Mapping	Ongoing; Limited data available (2007)	Map the region's wetlands/vernal pools to facilitate integration of enhancement measures into development and ecosystem restoration and mitigation projects. Some herbaceous wetland and critical habitat delineations mapped.
CONJUNCTIVE USE		
Paso Robles Groundwater Basin Water Banking Feasibility Study	Completed (2008)	Explored the feasibility of banking water in the Paso Robles Groundwater Basin for the benefit of County residents. This was considered a high-priority study with much potential because the Basin is the largest in the County and the Coastal Branch of the State Water Project (SWP) enters the County adjacent to the Basin.
Groundwater Recharge Optimization Program	Completed (2012); within Paso Robles Groundwater Management Plan	Compiles info on the optimal locations for recharge to improve regional water supply reliability and quality by using the other efforts/programs underway such as land use and watershed planning efforts, flood and storm water management; water banking feasibility studies; etc
DESALINATION		
Morro Bay Desalination Facility Upgrade	Completed (YEAR)	Installs an energy recovery system in its existing desalination facility to reduce electrical consumption; increases production capacity via reclaiming facility effluent; reduces dependence on State Water and local groundwater
Cambria Desalination Facility Project	Unknown	Constructs a seawater desalination plant that includes a subsurface seawater intake, pumping and pipeline facilities to transport seawater to the plant, a reverse osmosis (RO) treatment process, a groundwater blending system, etc
Desalination Study	Full Project List	Evaluates potential for desalination applications in the region by reviewing existing desalination facilities and existing study/project information to document opportunities for locations of new facilities.
LAND USE PLANNING		
Low Impact Development Program	Completed (YEAR)	Adopts LID requirements for new development and redevelopment that include wetland and riparian corridor protection and restoration, open spaces, stormwater retention, and utilization of smart growth principles.
Agriculture Element	Completed (2010)	Identifies areas of the region with productive farms, ranches and soils, and establishes goals, policies and implementation measures that will enable their long-term stability and productivity; identifies open space to protect; etc
NPS POLLUTION CONTROL		
Rural Road Erosion Program	Removed	Implements a program to monitor and reduce rural road erosion in order to protect source water quality; can be used to support implementation of TMDL and stormwater programs; will assist with locating or drainage problems
Morro Bay NPDES Illicit Discharge Detection and Elimination Ordinance	Unknown	Seeks to adopt an Illicit Discharge Detection and Elimination (IDDE) Ordinance, a requirement of the City's Stormwater Management Plan, to prevent illicit discharges to sensitive bay, creek and ocean habitats

Project Category and Title	2013 Project Status	Project Summary Statement
Lake Nacimiento Watershed Mercury Sediment Reduction Project	Completed (YEAR)	Includes a comprehensive site assessment, construction of three NPS MMP demonstration project sites designed to eliminate mercury sediment and acid rock drainage inputs and MMP effectiveness monitoring
WATERSHED PLANNING		
Data Enhancement Plan	Completed (2008)	Regional water monitoring program designed to provide data for planning, design, and operational purposes; data frequently interpreted to identify monitoring sites that might be dropped from the network or sampled less frequently, identify spatial gaps or the need for more frequent data collection.
Master Water Report	Completed (2012)	Develop region-wide study analyzing supply and demand by evaluating potential for new supplies; identify deficiencies and recommend projects, policies and programs to address those deficiencies.
Regional Permitting Plan	Completed (2008)	Develops regional permitting plan aimed at aligning Federal, State and local goals and objectives; establishes an orderly set of uniform conditions for projects to reduce processing time and increase consistency and effectiveness.
On-Farm Water Quality Enhancement and Conservation Plan for Coastal Watersheds	Full Project List	Prioritize planning and implementation projects on agricultural lands that address non-point source pollutants and the loss of riparian corridors. Integrate one or more agricultural BMPs such as irrigation efficiency
Floodplain and Riparian Enhancement Feasibility Plan for Arroyo Grande Creek	Full Project List	Design and implement floodplain projects in order to reduce downstream flooding and sediment loads, encourage groundwater infiltration, and expand riparian/ floodplain habitat.
Sustain SLO North: A Water Conservation Stewardship Plan for North County, San Luis Obispo	Full Project List	Considered planning application; considered regional (USLTRCD boundaries); would work well in a collaborative watershed planning proposal with a broader regional-scope.
Alternatives Analysis and BMP Implementation Plan for the Oso Flaco Watershed	Full Project List	NEED DESCRIPTION; Would work well in a collaborative watershed planning proposal with a broader regional-scope. Potential for collaboration with Cachuma RCD.
County-wide Fish Passage Barrier Evaluation	Watershed Management Planning Study (2013/14)	NEED DESCRIPTION; considered regional (each watershed in Region); would work well in a collaborative watershed planning proposal with a broader regional-scope; financial capacity unknown.
County-wide Approach to Understanding Instream Flow Needs	Completed (2013/14)	Help the SLO Region to better understand the instream flow needs of key species and environmental factors; improve the stakeholders' ability to better manage local water resources in a way that considers environmental stewardship.
WATER AND WASTEWATER TREATMENT		
Atascadero Lake Treatment System	Ongoing	Installs a treatment system for urban lake; improve water quality; provide opportunities for implementing stormwater and TMDL programs
Paso Robles Water Treatment Plant Project	2013 IRWM Project	Constructs a treatment plant to reliably deliver water that meets all drinking water standards to its customers and facilitates conjunctive use between Lake Nacimiento and groundwater supplies
San Miguel CSD Wastewater Treatment Expansion	Completed (2009)	Expand existing wastewater treatment plant capacity (influent lift station, four aeration ponds, three effluent percolation ponds, etc to comply with waste discharge requirements and ensure adequate capacity during storm events
Templeton CSD Wastewater System Expansion	2013 IRWM Project	Expands existing treatment plant (including AIPS ponds) to accommodate buildout flows, ensure waste discharge and stormwater programs compliance; adding additional storage ponds for wet weather storage.
Los Osos Community Wastewater Project	Ongoing; Construction underway	Partially funded by Prop 84 Implementation grant; Includes gravity wastewater collection system and tertiary treatment facility intended for water reuse in the Los Osos Groundwater Basin and habitat site restoration, and roadway improvement.
Lopez Water Treatment Plant Membrane Rack Addition	2013 IRWM Project	Involves the installation of additional membrane filter modules in the existing five membrane filtration racks and the construction of a new sixth membrane filtration rack to increase its filtration capacity to provide greater reliability.

Project Category and Title	2013 Project Status	Project Summary Statement
Cambria Pump Station	Full Project List	Construct a new storm water pump station and outlet structure to pump floodwaters from the lowest part of West Village directly into Santa Rosa Creek, significantly reduce flooding in the sump area of the West Village of Cambria.
Interceptor Sewer System Replacement, Oak Shores, CSA 7A	Full Project List	Construct new gravity sewerlines, 8 lift stations, manholes, pipe bridges, and pump systems to replace the Eastside and Westside Interceptor Sewer System.
Oceano Community Services District Water System Improvements	Full Project List	Provide various water system improvements to the community of Oceano, to improve water supply reliability and to improve water quality.
Lopez Pipeline Improvements	Full Project List	Optimize Lopez pipeline delivery capacity, working in conjunction with project to install additional membranes at the Lopez Water Treatment Plant to increase the overall capacity of the Lopez Project and to improve the water supply reliability.
San Miguel Community Services District Water System Improvements	2013 IRWM Project	Provide various water system improvements to the community of San Miguel, to improve water supply reliability and to improve water quality.
Chorro Valley Master Water and Waste Water Plan	Full Project List	NEED DESCRIPTION
WATER TRANSFERS		
Nipomo CSD Supplemental Water Project	Phased; Phase 1 under construction (2013)	3 phased project constructs treatment facilities and pipeline to ultimately transfer 3,000 acre feet of supplemental water per year from Santa Maria to Nipomo. Phases will increase water supply to 645 AFY, 1,600 AFY, and 3,000 AFY, respectively.

B. 2013 IRWM Plan Full Project List

The table below includes all concepts and project/programs meeting the minimum requirements of an IRWM project. This Full Project List includes 37 relevant 2007 IRWM projects as well as 77 relevant and integrated 2013 project submittals. The list will be an appendix to the IRWM Plan, and will be updated on an as-needed basis (at a maximum of every two years). All projects included on this list are considered to be a part of the IRWM Plan and will be considered for future funding and implementation opportunities. The table includes the project title, sponsor, project category (e.g., concept, project or program) and primary IRWM benefit category. The sort order is first by Sub-Region or Multi-Regional category, then alphabetically.

Many of these project submittals contained opportunities for integration or consolidation. On October 16, 2013, the RWMG Working Group, Project Sponsors and Interested Stakeholders met to discuss the overall project solicitation process and results. The discussion resulted in identifying integration opportunities and developing an IRWM Plan project list. Following the meeting, the PMT combined this new integrated list with the 2007 IRWM Plan project list, as shown below.

If abstracts were integrated into one project, it will note which project submittals were combined under the column titled "project". For example, the Central Coast Vineyard Team and Upper Salinas Las Tablas Resource Conservation District integrated two project submittals. Their combined project title now reads: "***Improving On Farm Water Management Through Demonstration, Research & Outreach of Precision Ag BMPs*** *(integrated 2 submittals: Tracking and Conserving Vineyard Irrigation Water in the Paso Robles Groundwater Basin; North County Precision Irrigation Research Program_ Precision Agriculture)".*

IRWM Plan Update Full Project List

Current or Prior Submittal	Projects	Sponsor	Sub-Region	Project or Concept?	Project Category
2013	**Conservation Planning for Coastal Watersheds**	Coastal San Luis Resource Conservation District	Multi-Regional	Concept	Ecosystem
2013	**Agricultural Water Management and Conservation Program**	Coastal San Luis Resource Conservation District	Multi-Regional	Concept	Water Management
2013	**Closing Priority Conservation Data Gaps**	Coastal San Luis Resource Conservation District	Multi-Regional	Concept	Ecosystem
2013	**County-wide Watershed and Creek Signage**	Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)	Multi-Regional	Project	Ecosystem/Water Management
2013	**Countywide Watershed Planning Phase II**	Coastal San Luis Resource Conservation District	Multi-Regional	Concept	Ecosystem
2013	**Desalination Study**	Various	Multi-Regional	Concept	Water Supply
2007	**Development of Basic Salt & Nutrient Management Plans**	Various	Multi-Regional	Concept	Groundwater
2013	**Feasibility Study for Recycled Water for Agricultural Use**	Coastal San Luis Resource Conservation District	Multi-Regional	Concept	Water Supply
2007	**Federal Flood Insurance Program Compliance Study**	San Luis Obispo County Flood Control and Water Conservation District	Multi-Regional	Concept	Flood
2007	**Invasive Species Program**	County of San Luis Obispo	Multi-Regional	Program	Ecosystem
2013	**LID Pilot Program**	US-LTRCD	Multi-Regional	Program	Flood Management
2007	**Mined Lands Remediation Program**	San Luis Obispo County Flood Control and Water Conservation District	Multi-Regional	Program	Ecosystem
2013	**Raising Santa Margarita Dam**	Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS) (predecessor to future California Water District)	Multi-Regional	Concept	Water Supply/Groundwater
2013	**Rancher 2 Rancher Program**	Coastal San Luis Resource Conservation District	Multi-Regional	Concept	Water Management
2013	**Regional Implementation of Groundwater Management Activities**	Various (depends on basin)	Multi-Regional	Concept	Groundwater
2013	**SLO Communities Water Enhancement Program**	Central Coast Salmon Enhancement	Multi-Regional	Concept	Water Supply
2013	**Stormwater Rewards Rebate Program**	Coastal San Luis Resource Conservation District	Multi-Regional	Concept	Flood Management
2013	**Urban Landscape Water Management and Conservation Program**	Coastal San Luis Resource Conservation District	Multi-Regional	Project	Water Supply
2013	**Water Conservation Corps**	California Conservation Corps (CCC) – San Luis Obispo Center _ (Other Partners TBD)	Multi-Regional	Concept	Water Management
2007	**Waterways Vegetation Management Program**	San Luis Obispo County Flood Control and Water Conservation District	Multi-Regional	Program	Ecosystem
2007	**Wetland and Vernal Pool Mapping**	County of San Luis Obispo	Multi-Regional	Concept	Ecosystem
2013	**8th Street Upper Aquifer Well and Nitrate Removal Facility**	Los Osos Community Services District	North Coast	Project	Water Supply/Groundwater
2007	**Cambria CSD Water System Improvements**	Cambria CSD	North Coast	Project	Water Supply
2007	**Cambria Desalination Facility Project**	Cambria CSD	North Coast	Project	Water Supply
2007	**Cambria Pump Station**	San Luis Obispo County Flood Control and Water Conservation District	North Coast	Project	Water Supply
2007	**Chorro and Morro Groundwater Basin Management Plans**	Morro Bay National Estuary Program	North Coast	Concept	Groundwater
2013	**Chorro Creek Ecological Reserve Floodplain Restoration Project**	Morro Bay National Estuary Program	North Coast	Project	Ecosystem
2007	**Chorro Valley Master Water and Waste Water Plan**	City of Morro Bay	North Coast	Concept	Water Supply
2013	**Cambria Pump Station**	County of San Luis Obispo, Department of Public Works	North Coast	Project	Groundwater/Flood Management
2013	**Conservation Planning for North Coast Landowners**	US-LTRCD	North Coast	Project	Water Supply
2013	**County Service Area 10 – Clearwell Tank Roof Replacement**	San Luis Obispo County Flood Control & Water Conservation District	North Coast	Concept	Water Management
2013	**County Service Area 10A Water System Improvements** (Integrates 2 submittals: New 200k Gallon Storage Tank; and Storage Tank Roof Replacement)	San Luis Obispo County Flood Control & Water Conservation District	North Coast	Concept	Water Supply
2007	**Los Osos Community Stormwater Master Plan**	Los Osos CSD	North Coast	Concept	Flood

Current or Prior Submittal	Projects	Sponsor	Sub-Region	Project or Concept?	Project Category
2013	Los Osos Landfill Remediation – Pump and Treat	County of San Luis Obispo	North Coast	Concept	Groundwater
2007	Los Osos Water System Improvements	Los Osos CSD	North Coast	Project	Water Supply
2013	Los Padres CCC Center – Stormwater LID Treatment Project	Morro Bay National Estuary Program	North Coast	Project	Flood Management
2013	Morro Bay_Cayucos Sanitation District Salt and Nutrient Management Plan	City of Morro Bay	North Coast	Project	Groundwater
2007	Morro Bay NPDES Illicit Discharge Detection and Elimination Ordinance	City of Morro Bay	North Coast	Concept	Water Supply
2007	Morro Bay Wastewater Treatment Facility Upgrade	City of Morro Bay	North Coast	Project	Water Supply
2013	North Coast Watershed Plans	US-LT RCD	North Coast	Project	Ecosystem
2013	Rehabilitation_Installation of Retention Ponds in North Coast (store & release)	US-LTRCD	North Coast	Concept	Groundwater
2013	S&T Mutual Water Co_Golden State Water Co Intertie	S&T Mutual Water Company	North Coast	Concept	Water Supply
2007	San Simeon CSD Water System Improvements	San Simeon CSD	North Coast	Project	Water Supply
2007	San Simeon Small Scale Recycled Water Project	San Simeon CSD	North Coast	Project	Water Supply
2007	San Simeon Wastewater Treatment Facility Upgrade	San Simeon CSD	North Coast	Project	Water Supply
2013	SLO County Drought Protection & Climate Change Preparedness Pilot Project	GREENSPACE – The Cambria Land Trust	North Coast	Concept	Water Management
2013	Streambank Stabilization & Restoration in Santa Rosa Creek	US-LTRCD	North Coast	Project	Ecosystem
2013	Water Conservation Partnerships in Chorro Valley	Morro Bay National Estuary Program	North Coast	Concept	Ecosystem
2013	21st Street Reservoir Reconstruction	City of Paso Robles	North County	Project	Ecosystem
2013	Atascadero Creek Watershed Management Plan	City of Atascadero	North County	Concept	Flood Management
2007	Atascadero Lake Treatment System	City of Atascadero	North County	Project	Ecosystem
2007	Atascadero Wastewater System Upgrade	City of Atascadero	North County	Project	Water Supply
2007	Attiyeh Ranch Conservation Easement Project	Land Conservancy of SLO	North County	Project	Ecosystem
2013	Community Based Social Marketing – Paso Groundwater Basin Community (water quality & quantity)	US-LTRCD	North County	Project	Water Management
2013	County Service Area 23 (CSA 23) Water Reliability Program	County of San Luis Obispo – Public Works Dept	North County	Concept	Water Supply
2013	County Service Area 7A – Oak Shores – Interception Sewer System Replacement	County of San Luis Obispo	North County	Concept	Water Supply
2013	Creston State Water Project Turnout	Requires formation of Water Purveying Entity	North County	Concept	Water Supply
2013	CSA 16 (Shandon) Water System Improvements (integrate 4 submittals: Waterline – Replace Centre Street; Waterline – Upsize 1st Street; Waterline Loop N. 2nd to N. 3rd Streets; New Storage Tank)	San Luis Obispo County Flood Control & Water Conservation District	North County	Concept	Water Supply
2013	CSA 16 (Shandon) Water Reliability Project	County of San Luis Obispo	North County	Concept	Water Supply
2013	Emergency Water Turnout for Heritage Ranch CSD	Heritage Ranch CSD	North County	Project	Water Supply
2013	Evaluating land-surface subsidence and potential groundwater-storage losses as part of assessing proposed water banking sites in Paso Robles Groundwater Basin	USGS	North County	Concept	Groundwater
2013	Groundwater Monitoring Program and Modeling Program for the Paso Robles Groundwater Basin	Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS) (predecessor to future California Water District)	North County	Concept	Groundwater
2007	Interlake Tunnel Project	Nacimiento Regional Watershed Management Advisory Committee	North County	Project	Water Supply
2013	Nature Center & Conservation Hub	US-LTRCD	North County	Concept	Water Management
2013	North County Fertilizer Regions_ Precision Agriculture	US-LTRCD	North County	Program	Ecosystem

Current or Prior Submittal	Projects	Sponsor	Sub-Region	Project or Concept?	Project Category
2013	**North County Strategic Plan**	Institute for Advanced Technology & Public Policy, Cal Poly, San Luis Obispo	North County	Concept	Groundwater
2013	**Off Stream Storage within the North County**	Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS) (predecessor to future California Water District)	North County	Concept	Groundwater
2013	**Phase 2 – Lake Nacimiento Potable Water Treatment Plant**	City of Paso Robles	North County	Project	Groundwater
2007	**Pilot Project Impact of Santa Margarita Lake Discharges on Groundwater Basin**	Unknown	North County	Concept	Groundwater
2013	**Recycled Water Treatment and Distribution System – Phase 1**	City of Paso Robles	North County	Concept	Groundwater
2013	**Recycled Water Treatment and Distribution System – Phases 2_3**	City of Paso Robles	North County	Concept	Groundwater
2007	**San Miguel CSD Water System Improvements**	San Miguel CSD	North County	Project	Water Supply
2013	**San Miguel Flood Control Program**	San Luis Obispo County Flood Control and Water Conservation District	North County	Concept	Flood Management
2013	**Supplemental Water Supplies for Paso Robles Groundwater Basin** (integrates 5 submittals: Community Water Systems for Subdivided Regions Overlying the Paso Robles Groundwater Basin; Irrigation Distribution System at Paso Robles Airport Area; Paso Robles Groundwater Basin Restoration and Basin Recharge; Paso Robles Groundwater Basin In-Lieu Recharge Study and Preliminary Layout)	TBD	North County	Concept	Water Supply
2007	**Sustain SLO North: A Water Conservation Stewardship Plan for North County, San Luis Obispo**	US-LTRCD	North County	Concept	Water Supply
2013	**Improving On Farm Water Management Through Demonstration, Research & Outreach of Precision Ag BMPs** (integrated 2 submittals: Tracking and Conserving Vineyard Irrigation Water in the Paso Robles Groundwater Basin; North County Precision Irrigation Research Program_ Precision Agriculture)	Vineyard Team & US-LTRCD	North County	Project	Water Supply
2013	**Templeton CSD East Side Force Main and Lift Station Project**	Templeton CSD	North County	Project	Water Supply/Groundwater
2007	**Templeton CSD Water System Improvements**	Templeton CSD	North County	Project	Water Supply
2013	**Toad Creek flood control, restoration and basin re-charge**	US-LTRCD	North County	Project	Flood Management
2013	**Toad Creek Waterway Management Program**	SLO County Flood Control and Water Conservation District	North County	Concept	Ecosystem/Flood Management
2013	**Upper Salinas Watershed Plans**	US-LTRCD	North County	Project	Ecosystem
2013	**Vertical Well Project for HRCSD**	Heritage Ranch CSD	North County	Concept	Water Supply
2013	**Water-wise program (with target applied irrigation rates)**	US-LTRCD	North County	Project	Water Supply
2013	**Alternatives Analysis and BMP Implementation Plan for the Oso Flaco Watershed**	Coastal San Luis Resource Conservation District	South County	Concept	Ecosystem
2013	**Arroyo Grande Creek Channel Waterway Management Program**	San Luis Obispo County Flood Control and Water Conservation District, Central Coast Salmon Enhancement	South County	Project	Flood Management
2007	**Avila Beach Wastewater System Upgrade**	Avila Beach CSD	South County	Project	Water Supply
2013	**Beach Street Alley Waterline Replacement**	Oceano Community Services District	South County	Project	Water Supply
2013	**Conjunctive Use and Groundwater Banking Evaluation**	Oceano Community Services District	South County	Concept	Groundwater
2007	**Edna Valley Groundwater Basin Study**	Various	South County	Concept	Groundwater
2007	**Flood Control Zone 1/1A Waterway Management Program**	San Luis Obispo County Flood Control & Water Conservation District	South County	Program	Flood

Current or Prior Submittal	Projects	Sponsor	Sub-Region	Project or Concept?	Project Category
2013	**Flood Control Zone 3 – Lopez WTP Sludge Bed 1 & 2 Upgrades**	San Luis Obispo County Flood Control & Water Conservation District	South County	Concept	Water Supply
2013	**Floodplain and Riparian Enhancement Feasibility Plan for Arroyo Grande Creek**	Coastal San Luis Resource Conservation District	South County	Concept	Flood Management
2013	**Lopez Lake Spillway Raise Project**	Zone 3 Agencies (Cities of Arroyo Grande, Grover Beach and Pismo Beach, Oceano Community Services District and County Service Area 12)	South County	Concept	Water Supply
2013	**Lopez Pipeline Improvements**	Northern Cities Management Area (NCMA) Agencies: Oceano Community Services District (OCSD)_ City of Arroyo Grande_ City of Grover Beach_ City of Pismo Beach	South County	Concept	Water Supply
2013	**Lopez Water Project Habitat Conservation Plan**	San Luis Obispo County Flood Control and Water Conservation District	South County	Project	Ecosystem
2013	**Lopez Water Treatment Plant Membrane Rack Addition**	San Luis Obispo County Flood Control and Water Conservation District	South County	Concept	Water Supply/Groundwater
2013	**Mapping the saltwater_freshwater interface in southern San Luis Obispo and northern Santa Barbara County, California**	USGS	South County	Concept	Groundwater
2013	**Meadow Creek Restoration Plan** (integrates: Meadow Creek Flood Reduction)	Central Coast Salmon Enhancement (and Coastal San Luis RCD)	South County	Concept	Ecosystem
2013	**Mid-Higuera Bypass**	City of San Luis Obispo	South County	Project	Flood Management
2013	**Nacimiento Water Project Energy Recovery Turbine**	City of San Luis Obispo	South County	Concept	Water Management
2007	**Nipomo Area Water Reuse Plan**	Nipomo CSD	South County	Concept	Water Supply
2007	**Nipomo CSD Supplemental Water Project**	Nipomo CSD	South County	Project	Water Supply
2007	**Oceano Community Services District Water System Improvements**	Oceano CSD	South County	Project	Water Supply
2013	**Oceano Drainage Improvement Project – Hwy 1 & 13th Street**	County of San Luis Obispo, Department of Public Works	South County	Project	Flood Management
2007	**On-Farm Water Quality Enhancement and Conservation Plan for Coastal Watersheds**	CSLRCD	South County	Concept	Water Supply
2013	**Pismo Creek Watershed Program**	Central Coast Salmon Enhancement	South County	Concept	Ecosystem
2013	**Recycle Water Distribution System Expansion**	City of San Luis Obispo	South County	Project	Water Supply
2007	**Recycled Water Master Plan Update**	City of San Luis Obispo	South County	Concept	Water Supply
2013	**Regional Recycled Water System (Pismo Beach and SSLOCSD)** (integrates Pismo Beach Recycled Water System)	City of Pismo Beach	South County	Concept	Groundwater
2007	**San Miguelito Wastewater System Upgrade**	San Miguelito MWC	South County	Project	Water Supply
2013	**Santa Maria Groundwater Basin Model**	NCMA Agencies (Oceano Community Services District, Cities of Arroyo Grande, Grover Beach and Pismo Beach), Nipomo CSD	South County	Concept	Groundwater
2013	**See Canyon Watershed Management Plan**	Central Coast Salmon Enhancement	South County	Concept	Ecosystem
2007	**Southland Wastewater Treatment Facility Upgrade**	Nipomo CSD	South County	Project	Water Supply
2007	**Steelhead 4(d) Program**	Central Coast Salmon Enhancement	South County	Program	Ecosystem

D. 2013 IRWM PLAN SHORT PROJECT LIST

The Short Project List is an inventory of all projects and programs submitting a Long Form under the Phase 2 solicitation process. Concepts and/or projects that have a lower "readiness-to-proceed" are included in the Full Project List (Section B), but were not asked to submit a Long Form for consideration in the Short Project List below.

The Short Project List of projects identifies those projects/programs that are technically feasible and strategically suited to be fully described in the IRWM Plan. Projects listed in grey below submitted long forms, which will be included in the IRWM Plan update appendix; however due to reason stated in the table, that project does not have enough data or does not address enough objectives (per State Guidelines) to adequately incorporate information throughout the IRWM Plan update itself. That differentiation does not note a project as being less significant. It simply means that the project will not be incorporated into various IRWM Plan sections. All projects will still remain on the Full Project List, and are considered to be supported by this IRWM Plan.

A detailed project analysis compiled as a Project Review White Paper (PWP)[4] evaluated each project's strategic value in meeting the State Objectives and Resource Management Strategies, as well as the IRWM Plan's Water Management Strategies, and its Goals and Objectives. The PWP is a resource document developed for purposes of documenting detailed material to be used in populating the various IRWM Plan sections.

PWP No.	Project Code	Project Title	Primary Reason for In or Out of IRWM Plan
1	**MLTP_ECO1**	Livestock & Land Program	Included for its multi-objective regional benefits and water quality enhancement while gaining private property owner volunteer participation for purposes of environmental stewardship.
	MLTP_FLD1	Water Conservation Corps	Not included at this time due to low RTP.
	MLTP_WMT1	County-Wide Watershed Awareness Campaign	Not included at this time due to medium RTP and lower total Objectives-based point score.
2	**MLTP_WMT2**	LID Pilot Program	Included for its public education and outreach, as well as targets private property owners to volunteer and pay for LID projects with monetary rebate incentives.
3	**NCNT_ECO1**	North County Fertilizer Regions_ Precision Agriculture	Included for its wide public educational value and regional water quality benefits through volunteer participation by private property owners with reduced fertilizer cost incentives.
4	**NCNT_ECO2**	Attiyeh Ranch Conservation Easement	Included for public and environmental stewardship values; both resulting in the protection of the watershed and endangered flora and fauna species in the region.
	NCNT_FLD1	Upper Salinas watershed plans	Not included at this time due to medium RTP.
5	**NCNT_GWM1**	Atascadero Groundwater Basin Augmentation Expansion Project	Included because of the multi-objective elements of improving recycled wastewater for higher beneficial use as a source for groundwater recharge and potable supplies in the Salinas Underflow.
6	**NCNT_WMT1**	Community Based Social Marketing	Included due to its low cost high education value over a broad region, enlisting support of private property owners to take ownership of their environment, and improving sustainable farming and business practices.
7	**NCNT_WMT2** **NCNT_WMT3**	North County Precision Irrigation Research Program_ Precision Agriculture **and** Tracking and Conserving Vineyard Irrigation Water in the Paso Robles Groundwater Basin	Both projects are included for their wide public educational value and regional water demand reduction benefits over a critically impacted groundwater basin, and both offer change in irrigation practices through volunteer participation by private property owners with reduced pumping cost incentives. Integrated title: *Improving On Farm Water Management Through Demonstration, Research & Outreach of Precision Ag BMPs*

[4] TO BE AVAILABLE AFTER DEC. 2, 2013:
http://www.slocountywater.org/site/Frequent%20Downloads/Integrated%20Regional%20Water%20Management%20Plan/IRWM%20Plan%20Update%202014/

PWP No.	Project Code	Project Title	Primary Reason for In or Out of IRWM Plan
8	**NCNT_WSP1**	City of Paso Robles Lake Nacimiento Water Treatment Plant Construction	Included due to its maximizing existing supplemental water supplies in a critically impacted groundwater basin, and use as a conjunctive supply for drought protection and effects of climate change in the region.
9	**NCNT_WSP2**	San Miguel Critical Water System Improvements	Included due to the DAC need for critical water system improvements.
	NCST_ECO1	Water Conservation Partnerships in Chorro Valley	Not include at this time due to low RTP and low total Objectives-based point score.
10	**NCST_GWM1**	8th Street Upper Aquifer Well and Nitrate Removal Facility	Included for its multi-Objective values of managing a critical groundwater basin subjected to continuous degradation of water quality from septic systems (nitrates) and sea water intrusion, and the local collaboration between the agencies and public using a vetted management plan.
11	**NCST_FLD1**	Los Padres CCC Center – Stormwater LID Treatment Project	Included for its multi-Objective benefits of environmental stewardship, LID educational opportunities, and the conversion of private lands to restore a rich ecosystem of flora and fauna.
	SCNT_FLD1	Mid-Higuera Bypass	Not included at this time due to its medium RTF and low Objectives point score.
12	**SCNT_FLD2**	Oceano Drainage Improvement Project – Hwy 1 & 13th Street	Included due to multi-Objective elements of providing a DAC with health and safety along with water quality, groundwater recharge, and flood attenuation.
13	**SCNT_WMT1**	Lopez Water Treatment Plant Membrane Rack Addition	Included due to increased use of existing surface water supplies and reduction in groundwater use in a constrained groundwater basin shared by multiple agencies and private well owners.
20	**SCNT_WSP1**	Lopez Lake Spillway Raise Project	Not included due to low RTP.
14	**SCNT_WSP2**	Recycle Water Distribution System Expansion	Included due to increased recycled water use in a DAC with the benefit of reducing groundwater pumping in a constrained groundwater basin.
22	**SCNT_WSP3**	NCMA_NMMA Salt and Nutrient Management Plan (SNMP)	Not included at this time due to medium RTP.

Geographic significance of project selection is considered in project selection to ensure each Sub-Region is equally represented in the IRWM Plan. The figure in **Attachment 1** identifies the approximate location of the capital projects, and programs, typically spread across large areas, are positioned at the approximate center of the benefit areas.

E. NEXT STEPS

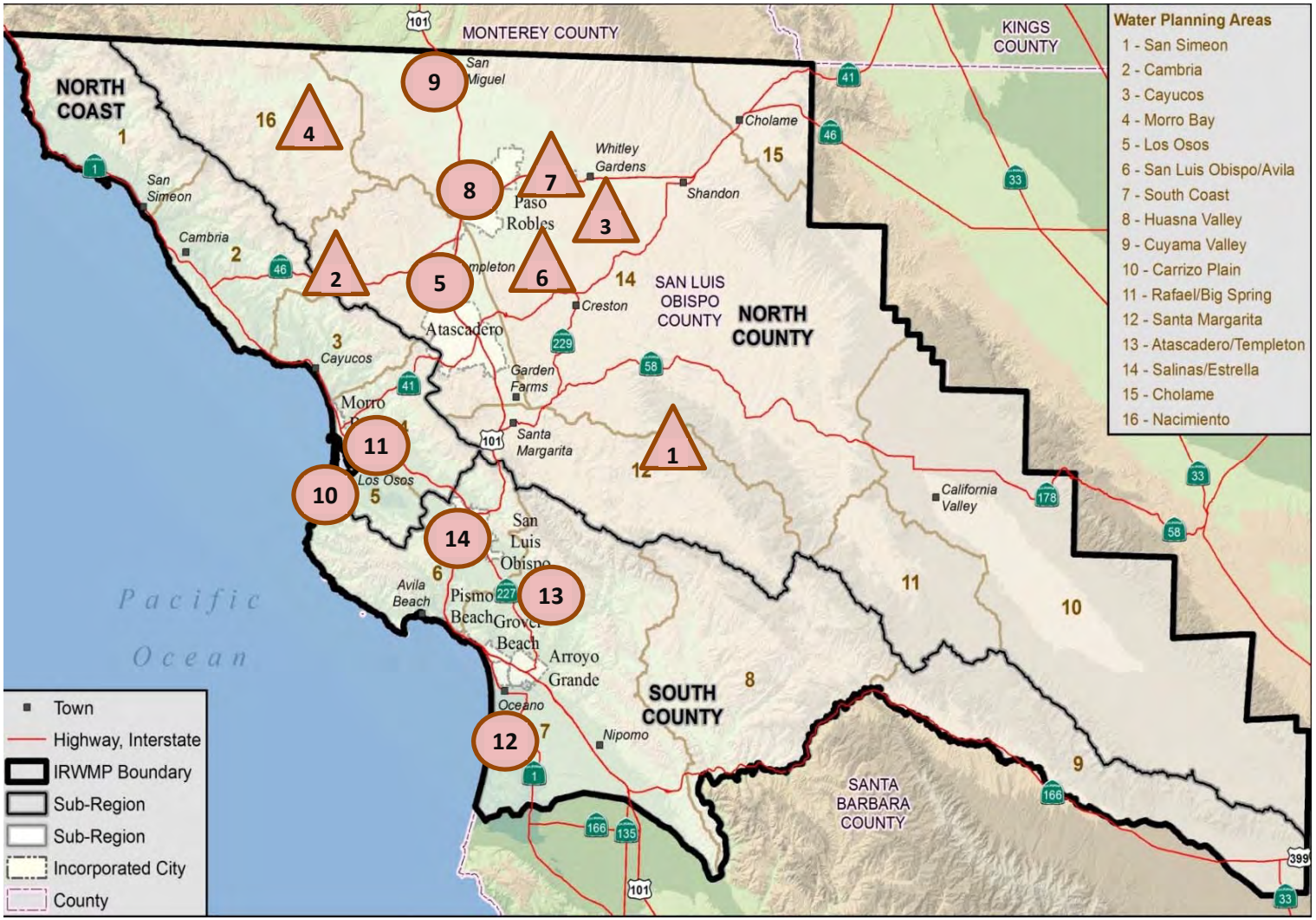
Upon receipt of all comments on November 26, 2013, the PMT will develop a Final Brochure to convey the results (and changes per RWMG review) to the RWMG. This will allow the PMT to incorporate project data into the complete Administrative Draft IRWM Plan by January/February and the Public Draft IRWM Plan by March/April. The RWMG and stakeholders can expect to receive the brochure electronically by December 4, 2013. The clear documentation of project review and selection is pivotal to meeting DWR requirements, and ensures acceptance of the IRWM Plan by the region's stakeholders upon final completion and adoption by the County Board of Supervisors and RWMG Member Agencies in June 2013.

ATTACHMENTS

1 - Map of 2013 IRWM Plan Short Project List Locations

2 - 2013 IRWM Plan Short Project List: Summary of Project Elements

ATTACHMENT 1 - Map of 2013 IRWM Plan Short Project List Locations



Programs ##

Projects ##

ATTACHMENT 2 - 2013 IRWM PLAN SHORT PROJECT LIST: SUMMARY OF PROJECT ELEMENTS

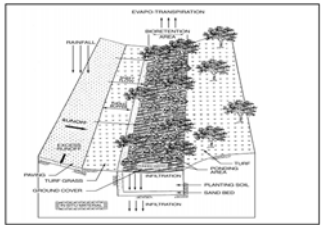
The following table of Project Technical Descriptions serves as a summary of the Project Elements, defined in the IRWM Plan as:

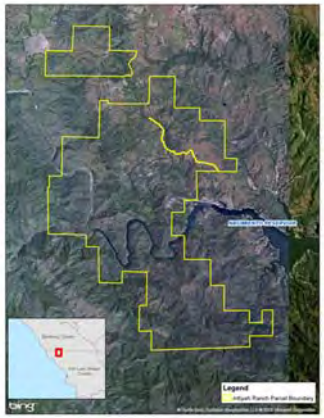
> *Project Elements are "building blocks" of region-specific activities derived from a thorough evaluation of the State's Resource Management Strategies (RMS) (**Section G – Resource Management Strategies**), and applied local Water Management Strategies (WMS), which consist of activities to promote the Goals and Objectives (**Section C –Goals and Objectives)** of the Updated Plan.*

The overlap of Project Elements amongst the selected projects illustrates the types of activities targeted for the IRWM region. The value of this understanding can further shape the high value projects or create additional and perhaps integrated projects where Project Elements are applied to several projects under one project/program umbrella. The synergism of combining related projects and sharing in the resources and learning from the combined efforts, are available if project sponsors want to improve the opportunity for outside funding. Additional detail for these opportunities and more information on each project is provided in the PWP.

SELECTED PROJECT TECHNICAL DESCRIPTIONS

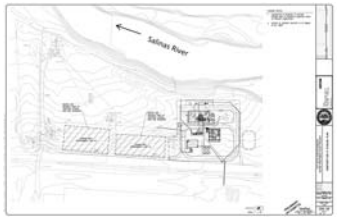
Project Title	Type	Project Elements	Technical and Strategic Summary
Livestock & Land Program 	Educational Program	• Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater. • Provide cost-effective alternatives to private property owners in managing on-site sources of contamination.	The Livestock and Land (L&L) Program addresses natural resource concerns faced by livestock owners by providing education, technical assistance and cost share for implementation of management measures. Water quality improvements will be achieved by giving livestock owners the tools to complete water quality site assessments and to implement Best Management Practices near listed waterways. The behavioral and management practice changes achieved by this program will provide immediate and lasting water quality and watershed improvements by reducing the off-site mobilization of manure, urine and sediments from livestock facilities. The program will make significant progress toward watershed goals listed in TMDLs and watershed plans.

Project Title	Type	Project Elements	Technical and Strategic Summary
LID Pilot Program 	Educational Program with Installation Drainage Devices to Optimize Irrigation and Groundwater Recharge	• Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams. • Provide cost-effective alternatives to private property owners in managing on-site sources of contamination. • Attenuate storm flows by increasing private property on-site retention and detention controls. • Provide public incentives to gain volunteer change in on-site water use and handling practices.	The Low Impact Development "Soak It Up" Rebate Program (Program) provides private property landowners in the North Coast and North County Sub-Regions rebates of up to 60% of the costs to install Low Impact Development (LID) features. The Program will include an education and outreach program available to all County residents regarding stormwater impacts of development and ways to reduce them. The US-LTRCD will provide free landscape assessments for property owners to determine appropriate LID strategies that can be implemented in order to reduce stormwater runoff and contamination. The property owner will receive a landscape assessment with site appropriate LID recommendations and plans. The property owner can build all or a portion of the LID features; and will pay for all costs of the installation. Those homeowners who build the features as per plan, pass an inspection, and sign a 10 year maintenance agreement with the RCD, can apply and receive up to 60% of the total project cost. The development of a LID grant program for private landowners will implement elements of local watershed plans with installation emphasis in severely drought affected watersheds, such as the Salinas River, Santa Rosa Creek, and San Simeon Creek. Strong support exists from both the civic community and the environmental community.
North County Fertilizer Regions_ Precision Agriculture 	Education Program with Changes in Fertilizing Practice	• Provide cost-effective alternatives to private property owners in managing on-site sources of contamination. • Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater.	This project produces nutrient management recommendations based on fertilizer regions in the North County. Regions are identified using soil characteristics, since they have the most effect on nutrient management. Agricultural sites are chosen from applicants in these regions and three different packages of nutrient management BMPs and fertilizer programs will be implemented at each of 5 locations. The costs and benefits of the treatments will be compared and reported to interested parties, and demonstrated to the public through RCD-developed workshops and tailgate style demonstrations. BMP's and nutrient management programs will be evaluated by measuring soil and water nutrient concentrations before and after treatments are implemented. Recommendations will be based on economic, agricultural and environmental factors. Maps, recommendations and management plans will be created to be shared with the public.

Project Title	Type	Project Elements	Technical and Strategic Summary
Attiyeh Ranch Conservation Easement 	Conservation Easement for the Protection of Lands in Perpetuity	• Create and preserve natural ecosystems and protect endangered flora and fauna through Land Stewardship and Conservation Easement programs. • Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater.	Easement to protect against land uses to ensure the land is managed consistent with the project goals. Land use impacts without the easement include: • Subdivision • Construction of houses or other structures • Waste dumps • Grading and soil dumping • Surface and/or subsurface mineral development • Installation of new above-ground utility systems, including, without limitation, water, sewer, power, fuel, and communication lines and related activities and equipment, except for systems servicing permitted agricultural uses on the ranch and existing structures • Cutting or removal of native trees, shrubs, or other vegetation, except for continued reasonable land management purposes, and as may be necessary for elimination of diseased growth, fire protection, and similar protective measures, and to protect human safety

Project Title	Type	Project Elements	Technical and Strategic Summary
Atascadero Groundwater Basin Augmentation Expansion Project 	Recyled Water Use, Groundwater Recharge, and New Potable Supplies	• Develop and improve water and wastewater treatment facilities to reduce point source discharges of contaminants to natural streams. • Develop and Improve methods of water reuse within a community.	The Templeton Community Services District (TCSD) currently utilizes two wastewater treatment and disposal options. Approximately 220,000 gpd are sent to the Paso Robles WWTP for treatment and disposal directly to the Salinas River, and the remainder of effluent (150,000 gpd) is treated by the TCSD Meadowbrook WWTP and discharged at the Selby Ponds where the treated wastewater percolates into the shallow aquifer system and the Salinas River underflow (highly transmissive soils underlying the Salinas River laid down over time). The TCSD already has the permitted capacity to treat 600,000 gpd of wastewater at its Meadowbrook WWTP and discharge the treated wastewater at the Selby Ponds, inclusive of the redirected 220,000 gpd, per existing WDR Order No. R3- 2007-0029. The proposed Atascadero Groundwater Basin Augmentation Expansion Project proposes to utilize the entire wastewater generated by the TCSD to augment local groundwater supplies for beneficial use within the community. The project has a number of distinct components that make up the entire project. For ease of explanation, they are broken down below as follows: **East Side Force Main and Lift Station Project (ESFM Project):** • Cessation of conveyance by TCSD of any wastewater to the Paso Robles WWTP where the treated wastewater is discharged to the Salinas River; • The Templeton Community Services District (TCSD) proposes to re-route the treatment and disposal location. Pipeline construction along a 2.4 mile corridor; Concurrently with the planning and development of the East Side Force Main and Lift Station Project (ESFM Project), the Meadowbrook WWTP is undergoing intensive study and evaluation to optimize the treatment and quality of the effluent. Once the new lift stations and force mains are completed, the operation of the Meadowbrook WWTP will be operating under optimum conditions. The goal is to insure that the highest quality water is percolated into the groundwater basin. Tertiary treatment at the WWTP will also be added to provide an additional level of treatment required to improve the percolation rates, meet future recycled water needs within the basin, and to meet anticipated regulatory requirements. While current and future flow estimates are considered in the design of the West Side Lift Station, actual facility operations and equipment are to be upgraded to meet the increase in wastewater flows. The West Side Lift station, as well as the collection system downstream of the discharge point (Peterson Ranch Rd.) of the Project will be upgraded to accommodate current and planned future wastewater flows. The Meadowbrook WWTP currently utilizes a manual bar screen to prevent large debris from entering the AIPS pond system. An improvement in screening will improve the overall performance of the plant by preventing a larger percentage of inorganic debris from entering the process and increasing employee safety. This component will ensure system reliability, regulatory compliance and assist in meeting water quality objectives.

Project Title	Type	Project Elements	Technical and Strategic Summary
Community Based Social Marketing	Educational Program	• Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater. • Provide cost-effective alternatives to private property owners in managing on-site sources of contamination. • Provide public incentives to gain volunteer change in on-site water use and handling practices.	Severe water supply shortages and TMDL listings show that residents in the Paso Robles Groundwater Basin require urgent outreach to bring an understanding of how residents can participate in creating solution-oriented behavior changes for water conservation and basin sustainability. The US-LTRCD plans to implement a community-based social marketing campaign (CBSM) to address water quality as well as quantity. This pragmatic approach involves an interactive program identifying the barriers to a behavior that is debilitating to the Paso Robles Basin, developing dynamic and synergistic programs (and/or existing programs) to overcome these barriers, implementing an interactive program of education and outreach across the communities within the basin area and then evaluating the effectiveness of the program by tracking and establishing if behavior changes have occurred. The more direct involvement with the communities in the Paso Robles Basin area, the more we will foster more sustainable behavior. By developing and implementing this program, individuals, businesses and the agricultural community will be educated on the cause/effect relationship with actions within the homes and within business and farm practices that harm and deplete the area's water supply. This education will be paired with practical ways on how these behaviors can be modified to directly support the mission of reducing greenhouse gas emissions, water conservation and preservation while positively impacting climate change.
North County Precision Irrigation Research Program_ Precision Agriculture 	Education Program with Reductions in Irrigation Water Use	• Provide public education in the value of conserving water for purposes of achieving sustainable surface water and groundwater drinking water supplies. • Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater.	Irrigated agriculture is a large user of water and energy in San Luis Obispo County. This program develops benchmarks for energy and water conservation by identifying through pump efficiency and irrigation distribution uniformity analysis poorly performing irrigation systems. Applications will be accepted from growers willing to cost share system components, adjust management practices, and share findings and conclusions with the public. The Center for Irrigation Technology and Advanced Viticulture will aid in experimental design and control. Soil moisture meters and weather stations will be installed on 5 North County sites. The sites will be monitored for 2-3 growing seasons, and system performance evaluated by changes in crop yields, and water and energy use. The findings of this project will be made available to the public by reports, website outreach, and workshops generated by the US-LTRCD, Vineyard Team and Stockman's Energy. Growers who receive the systems will be able to keep the equipment, but will be required to pay for any ongoing costs after the research has been completed.

Project Title	Type	Project Elements	Technical and Strategic Summary
City of Paso Robles Lake Nacimiento Water Treatment Plant Construction 	New Water Treatment Plant	• Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Implement groundwater management projects to improve the quality and quantity of groundwater in accordance with a regional stakeholder-based groundwater basin plan.	The City of Paso Robles currently relies on water from two sources: Salinas River underflow wells and groundwater from the deeper formation of the Paso Robles Groundwater Basin. Significant groundwater level declines in City wells and other basin wells have been occurring since the 1990's. San Luis Obispo County has certified the basin as a Level of Severity III, indicating the demand for water will equal or exceed its supply before supplemental supplies can be developed. The Lake Nacimiento Water Treatment Project will provide additional potable water for the City of Paso Robles, enabling the City to reduce groundwater pumping within the overdrafted Paso Robles Groundwater Basin. City of Paso Robles water deliveries for 2005 and 2010 were 7,163 acre-feet per year (AFY) and 5,749 AFY, respectively. Water deliveries in 2010 were much lower than 2005 deliveries because of mandatory City-wide outdoor water use restrictions implemented in 2009. Level 2 of the City's Water Conservation Ordinance and Water Shortage Contingency Plan (See Attachment) was implemented to reduce summer peak water demands and thereby manage a projected water production shortfall of 20 percent. These restrictions will be lifted when the Lake Nacimiento surface water supply becomes usable by Paso Robles. As the projected customer water deliveries are expected to increase to 12,460 AFY in 2035 (2010 UWMP). City is committing to 4,000 AFY initially.
San Miguel Critical Water System Improvements 	System Improvements Including Backup New Generators	• Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Seek outside funding for water and flood control projects in low income areas	This project is seeking construction of six of the highest priority, critical water supply projects as listed below. The District needs to implement all six of these identified projects in the immediate future, or they will be faced with continued deterioration of an already deficient water system, and may not be able to support even limited beneficial growth with the identified deficiencies that face the District's water system. 1. **New Fire Hydrants and Wharf Head Replacements** – Thirteen (13) new fire hydrants to replace inadequate and aging hydrants. 2. **Well 3 Rehabilitation** - Well 3 is over 40 years old and requires upgrades in the well motor housing, disinfection system, electrical wiring, backup power generation and the protective structural building. 3. **New Water Well Siting Study** – Respond to the urgent need of replacing the San Lawrence Terrace Well, taken out of service because of high arsenic concentrations, and providing water supply redundancy in the event of an emergency shutdown of any three existing wells. 4. **Emergency Backup Power** – Equip Well 3 and Well 4 with power generators in the event of power failures to maintain a minimum supply of water during widespread power outages. 5. **New Water Storage Tank** – Construct the San Lawrence Terrace Water Storage Tank with 0.25 million gallons for capacity and water quality improvements. 6. **12th and K Street Water Main Upgrades** – Replace old and undersized piping at 12th Street and K Street.

Project Title	Type	Project Elements	Technical and Strategic Summary
8th Street Upper Aquifer Well and Nitrate Removal Facility 	New Treatment and Supply Well Facilities	• Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Develop new groundwater management projects to improve the quality and quantity of groundwater in accordance with a regional stakeholder-based groundwater basin plan.	The Los Osos Community Services District (LOCSD) is proposing to construct a new upper aquifer well and nitrate removal system at an existing water well facility in the community of Los Osos. The project includes installation of a new well with well pump, ion-exchange nitrate removal skid-mounted treatment system, pre-manufactured 600 square foot metal building, 5,000 gallon High Density Polyethylene (HDPE) tank, and various piping to connect the site's existing facilities to the new structures. The new well will be approximately 125 feet deep and it is estimated that the pumping capacity will be 150 gallons per minute (150 AFY). The new well will be drilled adjacent to the existing lower aquifer well at the 8th Street and El Moro Street Utility Water Yard location. Both the new and existing well heads will be enclosed in a new pre-engineered metal warehouse building along with the nitrate removal treatment equipment. The existing wellhouse for the lower aquifer will be demolished. Water from the new well will be pumped through the nitrate removal facility and then piped to the main LOCSD water distribution system. Brine from the nitrate removal ion exchange unit will be stored in a 5,000 gallon tank adjacent to the wellhouse building and periodically trucked offsite to an approved disposal facility. Based on the capacity of the new well pump, it is estimated that the brine tank will need to be drained approximately four (4) times per week. On August 5, 2008, the Court approved an Interlocutory Stipulated Judgment (ISJ) between LOCSD, Golden State Water Company, S&T MWC and the County. The ISJ formed a Working Group with the purpose of researching the current condition and uses of the Los Osos Groundwater Basin, and adopting a Basin Management Plan (Basin Plan) to resolve conflicting claims related to Basin water resources. The Basin Plan is the result of those efforts and is intended to fulfill the obligations of the Parties pursuant to the ISJ. As a member of the ISJ Working Group, LOCSD has identified certain projects that provide an overall benefit to the groundwater basin. This project will ultimately benefit all Water Purveyors in the Los Osos Basin (Golden State Water Company, S&T Mutual Water Co. and LOCSD) by reducing the pumping on the Lower Aquifer and increasing the production from the Upper Aquifer, which will help reduce sea water intrusion and reduce the risks to each of the water purveyor's water supply wells.

Project Title	Type	Project Elements	Technical and Strategic Summary
Los Padres CCC Center - Stormwater LID Treatment Project 	Education and Improved Ecosystem	• Develop methods of adapting to Climate Change and other vulnerabilities to the region's water resources. • Create and Preserve natural ecosystems and protect endangered flora and fauna through Land Stewardship and Conservation Easement programs. • Develop and Improve methods of water reuse within a community. • Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater.	The Los Padres Center Project represents a Low Impact Development (LID) implementation project at a scale and under ownership where research, education, and water resources management can take place concurrently within a self-contained ecosystem. While not a large project, the Los Padres Center Project does offer opportunities for land use agencies to see and understand the elements of LID The area of land that will be benefitting from Stormwater LID Treatments belongs to the National Guard and are leased by the California Conservation Corps (CCC). The CCC - Los Padres Center is a residential center where approximately 80 corpsmember reside. Participants are 18-25 years old and sign up for 1 year to work on conservation projects that teach them skills and earn educational scholarships to help them be employable when they leave the CCC. The Center is located next to Chorro Creek and Poison Ivy Creek. By implementing this project the corpsmembers will not only benefit by learning LID techniques, and the importance of water quality and water conservation but will also benefit by having a more livable area at the center that will thoroughly engage them in land stewardship that they will take with them when they move on. Chorro Creek and listed endangered species such as, steelhead and California red-legged frogs will benefit by a reduction in peak run-off that degrades water quality and quantity by creating detention basins keeping the water on the land longer before slowly discharging in Chorro Creek. Morro Bay National Estuary Program brings together citizens, local governments, non-profits, agencies and landowners to protect and restore Morro Bay. This project is a collaboration with the CCC and the National Guard to implement a demonstration project that will target action items outlined in their Comprehensive Conservation Management Plan that provides guidance on recovery actions that will result in restoring and protecting the Bay by improving water quality, enhancing steelhead habitat, conserving water and providing natural environments for citizens to enjoy. The CCC Stormwater LID Treatment project is an ambitious demonstration project which will focus on eliminating flooding at CCC Buildings while also increasing groundwater infiltration and habitat restoration by installing site specific topographical earthwork features. The project estimates that on-site earthwork and plumbing can mitigate over one million gallons of water on the project site while attenuating adjacent Chorro Creek storm surges through seven acres of habitat restoration. By widespread land cover and shade tree installation at 43% of the project site, groundwater recharge areas will be increased. Reducing energy costs and local water supply reserves, including recycled onsite water (greywater, rainwater, mechanical), will be utilized for irrigation and indoor non-potable water uses such as toilet flushing. Two constructed wetlands will contribute to the largest reduction in the large storm event runoff, while greatly improving stormwater quality and potential for recreational activities such as birding and onsite watershed education. Over 9280 native and food bearing plants will be planted to cool buildings and reduce energy use while greatly improving the aesthetic and educational environment for the resident CCC corps members and nearby San Luis Obispo residents. Seven "living areas" will be installed through placement of plantings and earthworks to reduce off-site travel of CCC Corps members and increasing onsite recreational and learning opportunities. This project aims to be a learning laboratory for the corps members and future watershed crews. The corps members will be active and included on the CCC Native Greenhouse onsite; installation of the earthworks: inclusion in the construction of infiltration basins and bioswales by directed CCC corps members; take a part in planting and maintenance of plants; and assist in plumbing irrigation of specific plants through recycled onsite waters (i.e., grey water and captured stormwater).

Project Title	Type	Project Elements	Technical and Strategic Summary
Oceano Drainage Improvement Project - Hwy 1 & 13th Street 	Drainage Project with Groundwater Recharge	• Attenuate storm flows and improve stormwater quality by increasing on-site retention and detention controls. • Seek outside funding for water and flood control projects in low income areas. • Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater.	The Project includes construction of approximately 1,500 feet of storm drain pipe, to convey drainage from the intersection of Highway 1 and 13th Street, and an outfall pond (sedimentation basin). The basin will collect storm flows and allow debris and sediments to settle out prior to discharge through the existing 36-inch culvert or a new box culvert located in the Arroyo Grande Creek levee. The project is located at the low point of an approximately 40.5 acre drainage shed area. The existing system is undersized for small storm events and as a result floods the Hwy 1 and 13th Street intersection and adjacent properties. The project will reduce the frequency of drainage issues at Hwy 1 and 13th Street by constructing drainage facilities that collect and convey flows to the Arroyo Grande Creek channel. The project will also lessen flows to the Meadow Creek Lagoon area, thereby_ helping to mitigate the existing drainage issues for downstream residences, businesses and the South County Sanitation District facilities. The project will reduce maintenance and storm related management of the surrounding area. It will improve access and circulation on Hwy 1 and adjacent roadways as well as increasing the efficiency of road operations and improve emergency response times for the surrounding area.
Lopez Water Treatment Plant Membrane Rack Addition 	Water Treatment Plant Expansion	• Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Develop new groundwater management projects to improve the quality and quantity of groundwater in accordance with a regional stakeholder-based groundwater basin plan.	Five communities receive treated water from the Lopez WTP and are entitled to varying quantities of treated water. The percentage that each community is entitled to, and therefore, the degree of benefit is as follows: Arroyo Grande - 50%, Oceano - 7%, Grover Beach - 18%, Pismo Beach - 20%, and CSA 12 (Avila Beach) - 5%. The Lopez WTP is a membrane filtration plant designed to treat surface water from Lopez Lake, a dam built in 1969 along the Arroyo Grande watershed. The Lopez Water Treatment Plant (WTP) Membrane Rack Addition Project involves the installation of additional membrane filter modules in the existing five membrane filtration racks and the construction of a new sixth membrane filtration rack. Addition of the membrane filtration modules and the membrane filtration rack will increase the WTP's filtration capacity enabling it to distribute more water to Zone 3 Agencies (five communities) and to provide greater reliability. The current membrane filtration capacity of the Lopez WTP is not sufficient to provide Zone 3 communities with their peak demands with available surface water. Because of this capacity limitation, these agencies pump groundwater, even when they have excess surface water entitlements and allocations available to them. Groundwater demands increase risk of saltwater intrusion and decrease availability of groundwater. Groundwater quality is also not as good as treated Lopez water. This project would enable the Lopez WTP to provide enough treated water to meet peak demands, thus, reducing groundwater pumping and improving water quality. The existing five membrane filter racks at the Lopez WTP require frequent and routine cleaning and maintenance, requiring certain racks to go 'off-line' for cleaning. Some cleaning requires two racks to be 'off-line' at the same time. During these types of cleaning and maintenance procedures, the Lopez WTP cannot produce peak contractual water allocation demands. The addition of membrane filter modules to the existing rack and an additional membrane filtration rack would allow cleaning and maintenance to occur while producing peak contractual water allocation demands.

Project Title	Type	Project Elements	Technical and Strategic Summary
Recycle Water Distribution System Expansion 	Recyled Water System Expansion	• Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Develop new groundwater management projects to improve the quality and quantity of groundwater in accordance with a regional stakeholder-based groundwater basin plan.	The project proposes to extend the City's recycled water distribution system from the existing 14-inch ductile iron recycled water main on Madonna Road with approximately 2,000 feet of new six-inch recycled water main to serve CL Smith Elementary School. Recycled water mains would be installed along Oceannaire Drive, Lakeview Drive, and Balboa Street, to CL Smith Elementary school located at 1375 Balboa Street. A new water service and water meter would be installed to serve the School's landscape. Minor modifications would be made to the School's irrigation system consistent with Title 22 requirements for signage and tagging of irrigation equipment. CL Smith Elementary School will be served recycled water from the existing 600,000 gallon recycled water storage tank and pump station at the City's Water Reclamation Facility. The San Luis Coastal Unified School District's Grounds Maintenance personnel are trained in the use of recycled water as Laguna Middle School is currently served recycled water by the City. The City has been delivering recycled water for landscape irrigation purposes since 2006 when improvements at the City's Water Reclamation Facility were completed as well as the first eight miles of pipeline for the recycled water distribution system. Annual deliveries have increased from 77.17 acre feet in 2007 to over 170 acre feet in 2013 at parks, the middle school, golf course, sports fields, and other sites. The City's goal is to deliver 1,000 acre feet per year of recycled water through retrofitting existing irrigation systems and connections to serve new development in the City. Demand to provide recycled water for landscape irrigation exists proximate to the City's existing recycled water distribution system; however, extensions of the distribution system are needed to connect future customers. CL Smith Elementary School was identified as a priority connection as it is located proximate to an existing backbone recycled water main.

STRATEGIC CONSIDERATIONS

The first step in the project review process places each project into an Objectives filter where a scoring system is applied to determine where a project succeeds in satisfying the IRWM Plans Goals and Objectives.[5] The scoring system used is as follows:

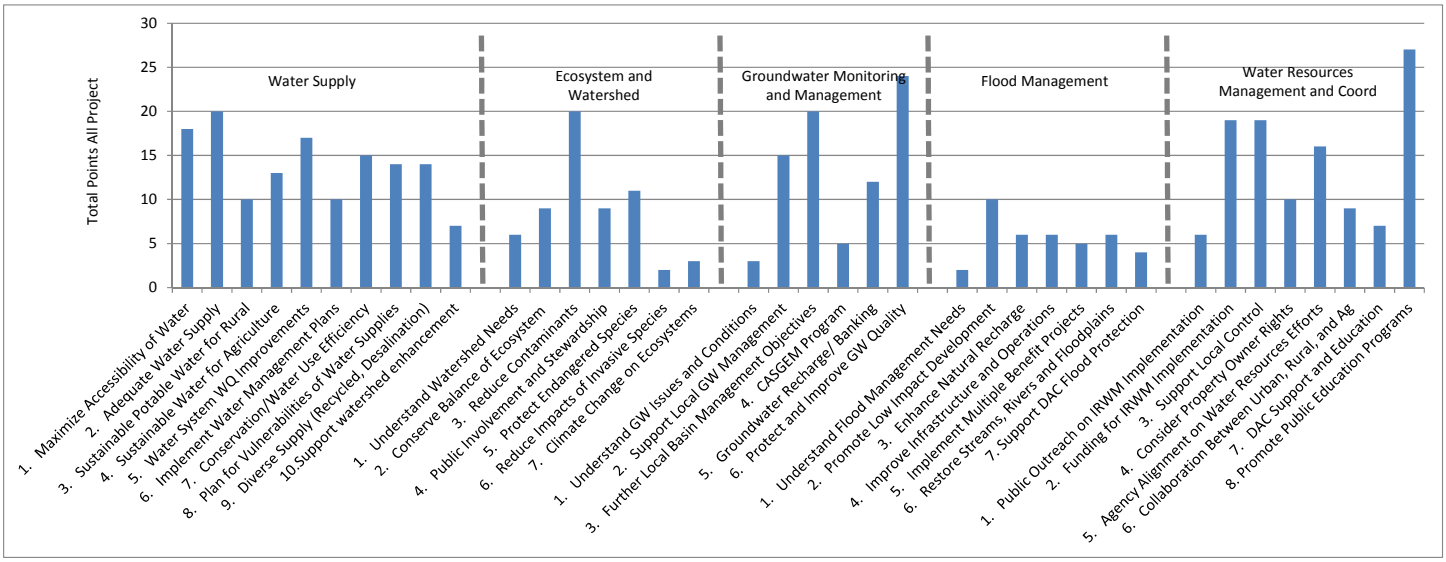
Score

1 – Project partially satisfies the Objective's intent but is not focused on achieving the Objectives intended outcome.

2 – Project is not directly aimed to satisfy the Objective's intended outcome, but Objective benefits can be measured, either qualitatively or quantitatively as part of implementation.

3 – Project is directly aimed to meet the Objective's intended outcome and includes a monitoring program for qualitative or quantitative measurement the Objectives physical benefits.

The figure below illustrates how the collective Project Short List's Project Elements meet IRWM Plan Objectives. To some extent, this chosen suite of IRWM Projects addresses all IRWM Plan objectives. The information gathered from this exercise is further used in associating the Project Elements (i.e., derived from WMS and RMS), as described in the individual in the Project Elements section in the PWP. From the figure, the Water Supply Goal shows to have the highest number of project benefits, and the Flood Management Goal the lowest number of benefits. Overall, the level of uniformity provides a high level of confidence in meeting each of the IRWM Plan's Objectives.



[5]All information contained within the PWP is derived from the Long Form and Objectives Worksheet; however, in cases where a difference is noted, the PWP takes precedence over both documents.

A Briefing Report on the San Luis Obispo Integrated Regional Water Management (IRWM) Plan Project List Update & Project Highlights

PURPOSE

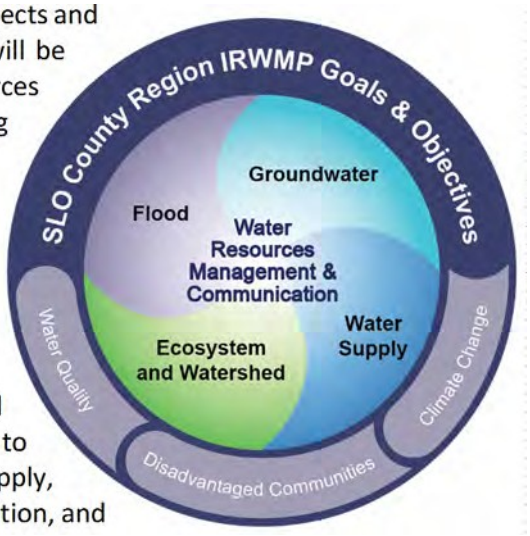
The purpose of this briefing report is to:

- Report on status of 2007 Integrated Regional Water Management (IRWM) Plan project list and/or seek input on each project's status and brief description
- Inform the region's stakeholders and project sponsors of the project selection results, including the results of the October 2013 RWMG Working Group integration workshop
- Solicit stakeholder and project sponsor comments regarding the content for either the final full and/or short project lists
- Solicit comments providing additional specificity and technical accuracy to the project descriptions and their impacts and benefits. *Note: Project Sponsors are currently reviewing a detailed report of the Project Short List for technical accuracy.*
- Provide a brief summary of how the final project short list (and its project "elements") help meet the Department of Water Resources (DWR) IRWM Guidelines

DWR has set a rigorous deadline for 2013 IRWM Plan completion. Thus our efforts are on a tight schedule, requiring comments on this report by **no later than 5:00 PM, November 26, 2013**. Please send comments to the PMT: Carolyn Berg (cberg@co.slo.ca.us) and Jon Goetz (jgoetz@geiconsultants.com). Within three (3) working days of receiving all comments, a brochure will be published to convey the final project list and the PMT will move forward with incorporation of the projects into the 2013 IRWM Plan sections.

INTRODUCTION

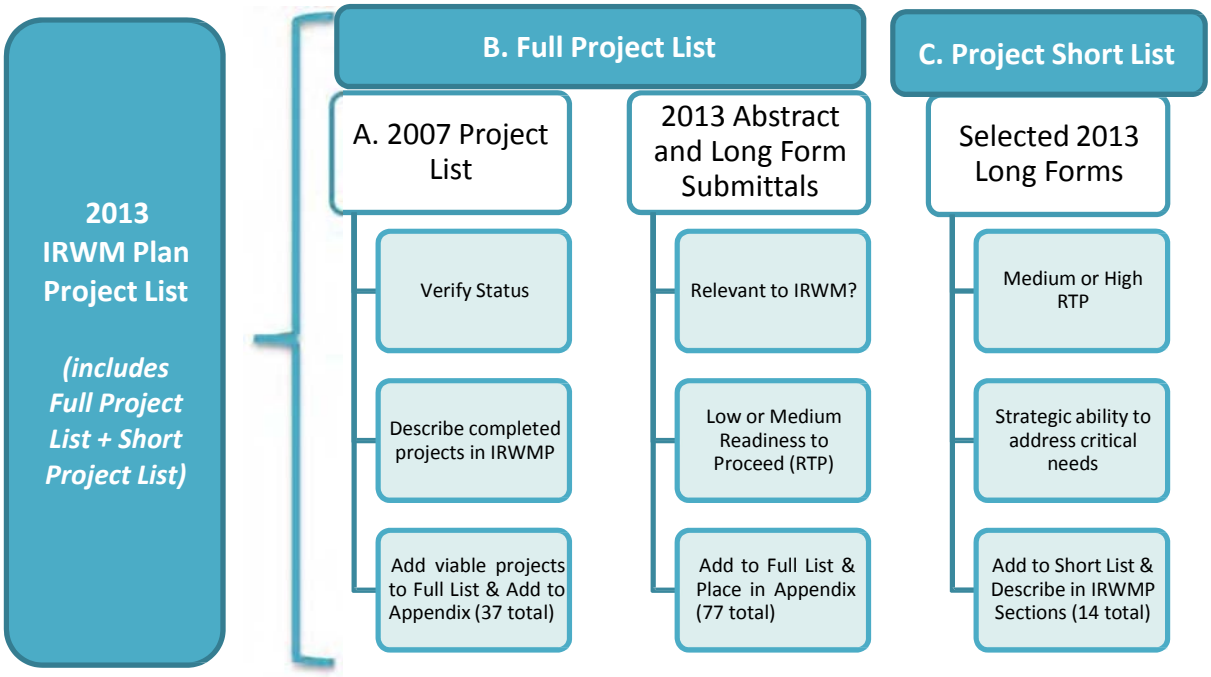
The San Luis Obispo County (SLO Co) IRWM Plan establishes goals related to water resources planning. The region's participants' and stakeholders' then implement projects and programs to achieve those goals. The IRWM Plan documents both completed and planned projects and programs, how those address goals, and specifically how each will be implemented. The IRWM Plan also maintains a list of water resources project/ planning concepts for stakeholders to consider over long term plan implementation.



SLO Co stakeholders have been actively engaged in the IRWM Plan update's project solicitation and review. From June to November 2013, the Project Management Team (PMT), under the direction of the Regional Water Management Group (RWMG), solicited water resources concepts and projects/programs from stakeholders. Agencies, organizations, and individual stakeholders submitted projects that would add value to SLO Co's integrated management of water resources: water supply, groundwater management, flood management, ecosystem restoration, and

general water resources management. As a result of this effort, 91 project[1] abstracts were submitted for PMT review.

The PMT reviewed and initially ranked these in accordance with the RWMG-approved project review guidelines (see IRWM website).[2] Some submittals were either not IRWM-related or were integrated into another project submittal. Of the 91 submittals, 77 were added to the Full Project List - 50 of those were classified as concepts[3], and 27 were classified as projects/programs. These projects have been added to the IRWM Plan Full Project List (see Section B), which also incorporates 37 concepts, programs and projects from the 2007 IRWM Plan.



These projects and the level of incorporation into the IRWM Plan are explained briefly below. This overview paper briefly describes the following:

A. 2007 IRWM Plan Project List
B. 2013 IRWM Plan Full Project List
C. 2013 IRWM Plan Short Project List
D. Next Steps
Attachment 1: Map of 2013 IRWM Plan Short Project List Locations
Attachment 2: 2013 IRWM Plan Short Project List: Summary of Project Elements

[1] Use of the term "project" in this report implies all three categories unless specifically called out as a project or program.

[2] <http://www.slocountywater.org/site/Frequent%20Downloads/Integrated%20Regional%20Water%20Management%20Plan/IRWM%20Plan%20Update%202014/>

[3] Concept refers to projects in the preliminary or planning stages. Projects/ programs have progressed beyond the preliminary planning stages.

A. 2007 IRWM PLAN PROJECT LIST

The 2007 IRWM Plan and related solicitations led to a list of concepts, projects and programs that aimed at addressing critical water resources needs. Over the past six years, some projects have been implemented, while others have remained as concepts or simply fell off of agencies' list. Based on a status review of each project, the projects' merits in meeting the updated Goals and Objectives, and the project sponsor's interest in pursuing the project, projects are being incorporated into the new project list. The intent is that projects remain on the IRWM Plan project list until they are built or an alternative project is submitted to fulfill the same, or similar, objectives.

The 2007 IRWM Plan project list (below) provides the full past project list and the current status of each. Certain projects have been completed or replaced by alternative solutions or change in water resources management priorities. Of these, 37 of the remaining projects have been added to the Full Project List (see Section B).

Definitions of the different status types are as follows:

Completed – Project has been completed or implemented.

Phased/ Ongoing – Generally refers to phased projects already underway and/or long term programs underway.

Full Project List – Project sponsor has submitted an updated project abstract for the 2013 IRWM Plan, or PMT judged the project and status as being viable for potential implementation.

2013 IRWM Project List – Project is included in the 2013 IRWM Plan Project List for incorporation into the plan sections.

Removed – Project has been removed from the IRWM Project list.

2007 IRWM Plan Project List and Status

Project Category and Title	2013 Project Status	Project Summary Statement
ECOSYSTEM RESTORATION		
Waterways Vegetation Management Program	Ongoing	Provides riparian vegetation, bank stabilization, and stream shading benefiting ecosystem restoration, water quality, flood protection, and aesthetics
Mined Lands Remediation Program	Ongoing	Supports Superfund National Priority Listing for and remediation of inactive/abandoned mining lands that adversely impact public health, water quality, and wildlife habitat.
Invasive Species Program	Ongoing	Provides opportunities for ecosystem preservation, public stewardship, natural resource conservation and integration into drainage improvement projects through utilization of native, drought tolerant plants and public outreach
ENVIRONMENTAL / HABITAT PROTECTION AND IMPROVEMENT		
Steelhead 4(d) Program	Ongoing	Develops and implements a Steelhead 4(d) program consistent with NMFS standards to improve water quality and fish and wildlife habitat.
Arroyo Grande Watershed HCP	Full Project List	Optimizes Lopez Lake Reservoir operations to balance retention of water for supply, release of water for ecosystem preservation, and riparian use.
Morro Bay Estuary Comprehensive Conservation and Management Plan	Completed (2013)	Implementation of these elements of the CCMP will protect, restore, and enhance the diverse habitats found in the estuary watershed and bay; promotes public awareness and involvement in estuarine management issues.
Attiyeh Ranch Conservation Easement Project	2013 IRWM Project	Acquire an 8,000+ acre conservation easement including 6 miles of the Nacimiento River and tributaries upstream of the lake; eliminates the development, subdivision potential, and land use intensification parcels.

Project Category and Title	2013 Project Status	Project Summary Statement
WATER SUPPLY RELIABILITY		
Nacimiento Water Project	Completed (2010)	45-mile long pipeline, 3 storage tanks, pump stations, and appurtenant facilities to convey raw water from Lake Nacimiento south to the communities of Paso Robles, Templeton, Atascadero, San Luis Obispo and Cayucos.
San Miguel CSD Water System Improvements	2013 IRWM Project	Provides a new welded steel water storage tank, new/ upgraded water transmission main and distribution mains to improve fire flow and service pressures and deliver drinking water meeting water quality standards
San Simeon CSD Water System Improvements	Full Project List	Replaces distribution piping and upsizes existing reservoir to provide adequate service pressures and fire protection under future conditions while increasing drinking water reliability and meeting water quality standards.
Lopez Water Treatment Plant Upgrade	Completed (2008)	Provides potable water supplies from the Lopez Lake reservoir to the communities of Arroyo Grande, Pismo Beach, Grover Beach, Oceano and the Avila vicinity via the Lopez Water Treatment Plant
Templeton CSD Water System Improvements	2013 IRWM Project	Installs and equips a new water supply well that draws from the Salinas River sub-flow and transmission piping under the railroad right of way for conveyance of water to the community distribution system
Cambria CSD Water System Improvements	Full Project List	Modifies their well system to mitigate contamination in their groundwater supply and meet drinking water standards, and upgrading their piping and storage facilities improve the reliability of their water supply to customers
County Service Area 23 (CSA 23) State Water Project Tie-In (Santa Margarita)	Full Project List	Construction of a State Water Pipeline (SWP) turnout and the approximately 65 feet of pipeline to the community of Santa Margarita. Provide a physical connection to CSA 23 for use during a drought or other water emergency.
Interlake Tunnel Project	Full Project List	Build tunnel between Lakes Nacimiento and San Antonio to allow the capture of watershed runoff (avoids release of thousands of AF of water released for flood control). Provides strategic release for downstream drinking/ groundwater recharge, seawater intrusion abatement, etc.
Design for the Installation of an Inflatable Rubber Dam Spillway Gate at Lopez Dam	Full Project List	Design and construction of an inflatable rubber dam spillway gate or a permanent spillway raise at the Lopez dam to raise the height of the dam, expand storage capacity and increase the safe yield of the Lopez Reservoir.
Heritage Ranch Emergency/Drought Water Supply Project	Removed; Replaced by 2013 submittal	Provide an emergency turnout from the Nacimiento pipeline which allows HRCSD to receive raw lake water for its water treatment plant, during extreme drought conditions when the Nacimiento Lake level is at dead pool elevation.
FLOOD MANAGEMENT		
Flood Control Zone 1/1A Waterway Management Program	Ongoing	Partially funded by Prop 84 Implementation grant. Increase the capacity of the leveed lower three miles of Arroyo Grande Creek while enhancing water quality and sensitive species habitat. Actions include raising levees, managing in-channel vegetation and reducing/managing sediment deposition.
Flood Control Zone 9 Waterway Management Program	Complete (2003)	Conduct an evaluation of the Edna Valley Groundwater Basin in order to establish its condition in terms of safe yield, hydrogeologic characteristics, overlying use, water quality and projected future use.
Federal Flood Insurance Program Compliance Study	Full Project List	Conduct a study to review how the region conforms to the Federal National Flood Insurance Program – determine the root cause of flooding problems, develop requirements for adequate creek setbacks, etc.
Flood Management Plan	Completed (2008)	Developed as a guide to implementing flood control projects; identify significant constraints affecting the ability to implement flood control projects and strategies to address the challenges.
Oceano Drainage Improvement Project – Hwy 1 & 13th Street	2013 IRWM Project	Construction of storm drain pipe, to convey drainage from the intersection of Highway 1 and 13th Street, and an outfall pond (sedimentation basin). Collects storm flows and allow debris/sediments settlement.
GROUNDWATER MANAGEMENT		
Nipomo CSD Salt Management Program	Full Project List	SNMP including strategies for managing water supplies to reduce salt input and identifies sources of salt in their wastewater collection system while implementing a pre-treatment program for non-residential dischargers.

Project Category and Title	2013 Project Status	Project Summary Statement
Los Osos Water System Improvements	2013 IRWM Project	Implements the following water system improvement projects, as identified in their Groundwater Management Plan and Water System Master Plan, to manage their groundwater supply and increase supply reliability and quality
Chorro and Morro Groundwater Basin Management Plans	Ongoing	Develops a resource and groundwater management plan for the Chorro and Morro Groundwater basins, including development of strategies to improve the watershed flow quantity and quality, and stream flows and underflows.
Edna Valley Groundwater Basin Study	Full Project List	Conducts an evaluation of the Edna Valley Groundwater Basin to establish its condition in terms of safe yield, hydrogeologic characteristics, overlying use, water quality and projected future use.
Groundwater Management Ordinance Study	Removed	Evaluates the feasibility of implementing a groundwater management ordinance by exploring terms of existing ordinances in other regions, local adjudication requirements and groundwater management plans or efforts, etc.
Development of a Groundwater Model and Activities within Santa Maria Valley Groundwater Basin	Phased; Characterization Study Underway (2013/14)	Study underway to conduct critical groundwater basin characterization activities in the Santa Maria Groundwater Basin (SMGB) to support development of a groundwater model and SNMP.
Paso Robles Groundwater Basin Model Update and Analysis of Potential Solutions	Completed (2013/14)	The District, in collaboration with the Paso Robles Groundwater Basin Steering Committee, will lead the effort to update the Paso Robles Groundwater Basin model (based on 1981 – 1997 data) to include data through 2011.
Paso Robles Groundwater Basin Salt and Nutrient Management Plan	Completed (2013/14)	Develop a complete SNMP for the Paso Robles Groundwater Basin to serve as model for the SLO Region and develop salt and nutrient management planning recommendations based on lessons learned and feedback from the RWQCB.
Development of Basic Salt & Nutrient Management Plans	Phased; Prioritization of basins study underway (2013/14)	Organized management of basins varies widely and there is a general lack of awareness of the RWQCB Recycled Water Policy (RWP). Identify the basin study areas where SNMPs are needed in the region, relevant stakeholders, etc
Upgrade of Water and Wastewater Systems, Operations, and Maintenance	Removed, Incorporated in other planning studies	Community-specific. Planning/ upgrade of systems, operations, & maintenance to decrease pumping of groundwater and establish a sustainable water system/portfolio. Elements covered by Groundwater Management Plan efforts.
Pilot Project Impact of Santa Margarita Lake Discharges on Groundwater Basin	Removed; Incorporated into other Project List submittals	NEED DESCRIPTION
RECREATION AND PUBLIC ACCESS		
Morro Bay Harborwalk	Completed (2010)	Constructs multimodal transportation improvements including enhancement and rehabilitation of 5 acres of coastal dunes, non-native species abatement, native restoration and storm water management.
STORMWATER CAPTURE AND MANAGEMENT		
Cambria Flood Control Project	Completed (2011)	Constructs a pressure storm drain system and pump station with an overflow bypass structure to alleviate flooding in Cambria, includes Santa Rosa Creek ecosystem enhancement and improved stormwater quality.
San Miguel Flood Control Project	Full Project List	Two phase implementation (by downstream and upstream) to collect and convey Salinas River 5unoff, includes a system of curbs, gutters, drop-inlets, constructed ditches, and underground storm drainage pipes.
Los Osos Community Stormwater Master Plan	Ongoing	Community-specific; anticipated to be done in conjunction with LOWWTP; there may be elements covered by consolidated watershed planning component.
WATER CONSERVATION		
Conservation and Open Space Element	Completed (2010)	Develop a comprehensive conservation element covering agricultural resources, air quality, biological resources, cultural resources, energy resources, mineral resources, open space resources, soils, visual resources and water resources.
Water Conservation and Erosion Control Education for SLO Co Vineyard Owners	Removed; Incorporated into other Project List submittals	NEED DESCRIPTION. Considered a project/design application. Suggest holding for implementation project solicitation process.

Project Category and Title	2013 Project Status	Project Summary Statement
WATER QUALITY PROTECTION AND IMPROVEMENT		
Atascadero Wastewater System Upgrade	Completed (YEAR)	Upgrades their wastewater treatment plant to ensure compliance with waste discharge requirements and construct new gravity pipeline to to improve water quality of water discharged back into Atascadero sub-basin
Avila Beach Wastewater System Upgrade	Unknown	Updates their wastewater treatment plant to ensure compliance with waste discharge requirements; improves the quality of the water before it is discharged into San Luis Creek and the ocean
California Men's Colony Wastewater System Upgrade	Completed (YEAR)	Upgrades the wastewater treatment plant to comply with waste discharge requirements and correct inflow/ infiltration problems that lead to treatment plant overflows. Enhance creek ecosystem and protect groundwater quality.
San Miguelito Wastewater System Upgrade	Unknown	Upgrades will potentially accommodate other local entities. Ensure compliance with waste discharge requirements. Improve effluent quality thereby improving source water quality and supporting the implementation of TMDLs.
Pismo Beach Wastewater System Upgrade	Completed (2006)	Upgrades wastewater treatment plant to comply with waste discharge requirements and correct capacity problems that lead to treatment plant overflows. Protect environment, support TMDL and stormwater programs, etc
Copper Piping Impact Study	Removed	Reviews impacts of copper piping in water distribution systems to implement policy to prevent negative impacts on drinking water supply and impacts on source water and the environment resulting from poor effluent quality.
Landfill Regulation Compliance Study	Removed	Reviews impacts of landfill operations on source water quality and ecosystems by documenting how they address TMDL and stormwater programs in complying with waste discharge requirements.
WATER RECYCLING		
San Simeon Wastewater Treatment Facility Upgrade	Completed (YEAR)	Upgrades existing wastewater treatment plant to from secondary to tertiary treatment (approved SEP) and will improve effluent quality. It will formally permit riprap armament and may include installation of seawall.
Morro Bay Wastewater Treatment Facility Upgrade	Completed (YEAR)	Upgrades to tertiary treatment; will provide increased treatment efficiency along with rehabilitation and modernization of the existing plant infrastructure as recommended by the RWQCB
Southland Wastewater Treatment Facility Upgrade	Completed (YEAR)	Retrofits an existing aerated lagoon wastewater treatment facility with wave oxidation technology to reduce nitrate discharge, installing headworks to screen out grit, and adds tertiary treatment to allow for recycled water use.
San Luis Obispo Reclamation Facility Upgrade	Completed (YEAR); Expanded distribution included as 2013 IRWM Project	Upgrading and adding various processes to increase capacity and to improve reliability and operational efficiency of the City's reclamation facility. Phase 2: add processes and equipment to remove nitrates from the treatment plant effluent and improve water quality.
South San Luis Obispo County Sanitation District Facility Upgrade	Covered by Regional RWSP (2013/14)	Upgrading its regional wastewater treatment plant to both meet waste and discharge requirements and allow for recycled water use in projects such a ecosystem enhancement and groundwater management. This meets implementation of inter-agency projects objectives.
Paso Robles Reclamation and Recharge Program	Ongoing; Construction underway	The wastewater treatment plant will be upgraded to tertiary treatment so the effluent can potentially be used for recharge, banking, irrigation, and/or ecosystem enhancement applications. Allow greater supply flexibility.
Recycled Water Master Plan Update	Full Project List	The City of SLO Recycled Water Master Plan Update will guide the expansion of the recycled water distribution system to serve users and maximize the use of available recycled water supply, thereby offsetting the use of potable water.
CSA 16 (Shandon) Water Reliability Project	Full Project List	Construct turnout facilities to connect the Coastal Branch of the State Water Project to the CSA 16 (Shandon) water distribution system.
Nipomo Area Water Reuse Plan	Unknown	Considered planning application; considered community-specific (Nipomo Mesa area of Santa Maria basin), but would work well in a collaborative recycled water planning proposal with a regional-scope.

Project Category and Title	2013 Project Status	Project Summary Statement
Supplemental Recycled Water Feasibility Study	Covered by Regional RWSP (2013/14)	The following agencies are investigating the feasibility of implementing recycled water programs within their service areas: Templeton Community Services District (TCSD), City of Morro Bay, City of Pismo Beach, South San Luis Obispo County Sanitation District (SSLOCSD), and Nipomo Community Services District (NCSD) via this Regional Recycled Water Strategic Plan (RWSP).
Preparation of a Recycled Water System Facilities Plan for the City of Pismo Beach	Covered by Regional RWSP (2013/14)	Covered by Supplemental RWSP study underway.
City of Morro Bay and Cayucos Community Services District (MBCSD) Recycled Water Master Plan.	Covered by Regional RWSP (2013/14)	Covered by Supplemental RWSP study underway.
San Simeon Small Scale Recycled Water Project	Full Project List	Title 22 Water available for distribution to offset potable water used for irrigation and hotel laundry use.
WETLANDS ENHANCEMENT AND CREATION		
Wetland and Vernal Pool Mapping	Ongoing; Limited data available (2007)	Map the region's wetlands/vernal pools to facilitate integration of enhancement measures into development and ecosystem restoration and mitigation projects. Some herbaceous wetland and critical habitat delineations mapped.
CONJUNCTIVE USE		
Paso Robles Groundwater Basin Water Banking Feasibility Study	Completed (2008)	Explored the feasibility of banking water in the Paso Robles Groundwater Basin for the benefit of County residents. This was considered a high-priority study with much potential because the Basin is the largest in the County and the Coastal Branch of the State Water Project (SWP) enters the County adjacent to the Basin.
Groundwater Recharge Optimization Program	Completed (2012); within Paso Robles Groundwater Management Plan	Compiles info on the optimal locations for recharge to improve regional water supply reliability and quality by using the other efforts/programs underway such as land use and watershed planning efforts, flood and storm water management; water banking feasibility studies; etc
DESALINATION		
Morro Bay Desalination Facility Upgrade	Completed (YEAR)	Installs an energy recovery system in its existing desalination facility to reduce electrical consumption; increases production capacity via reclaiming facility effluent; reduces dependence on State Water and local groundwater
Cambria Desalination Facility Project	Unknown	Constructs a seawater desalination plant that includes a subsurface seawater intake, pumping and pipeline facilities to transport seawater to the plant, a reverse osmosis (RO) treatment process, a groundwater blending system, etc
Desalination Study	Full Project List	Evaluates potential for desalination applications in the region by reviewing existing desalination facilities and existing study/project information to document opportunities for locations of new facilities.
LAND USE PLANNING		
Low Impact Development Program	Completed (YEAR)	Adopts LID requirements for new development and redevelopment that include wetland and riparian corridor protection and restoration, open spaces, stormwater retention, and utilization of smart growth principles.
Agriculture Element	Completed (2010)	Identifies areas of the region with productive farms, ranches and soils, and establishes goals, policies and implementation measures that will enable their long-term stability and productivity; identifies open space to protect; etc
NPS POLLUTION CONTROL		
Rural Road Erosion Program	Removed	Implements a program to monitor and reduce rural road erosion in order to protect source water quality; can be used to support implementation of TMDL and stormwater programs; will assist with locating or drainage problems
Morro Bay NPDES Illicit Discharge Detection and Elimination Ordinance	Unknown	Seeks to adopt an Illicit Discharge Detection and Elimination (IDDE) Ordinance, a requirement of the City's Stormwater Management Plan, to prevent illicit discharges to sensitive bay, creek and ocean habitats

Project Category and Title	2013 Project Status	Project Summary Statement
Lake Nacimiento Watershed Mercury Sediment Reduction Project	Completed (YEAR)	Includes a comprehensive site assessment, construction of three NPS MMP demonstration project sites designed to eliminate mercury sediment and acid rock drainage inputs and MMP effectiveness monitoring
WATERSHED PLANNING		
Data Enhancement Plan	Completed (2008)	Regional water monitoring program designed to provide data for planning, design, and operational purposes; data frequently interpreted to identify monitoring sites that might be dropped from the network or sampled less frequently, identify spatial gaps or the need for more frequent data collection.
Master Water Report	Completed (2012)	Develop region-wide study analyzing supply and demand by evaluating potential for new supplies; identify deficiencies and recommend projects, policies and programs to address those deficiencies.
Regional Permitting Plan	Completed (2008)	Develops regional permitting plan aimed at aligning Federal, State and local goals and objectives; establishes an orderly set of uniform conditions for projects to reduce processing time and increase consistency and effectiveness.
On-Farm Water Quality Enhancement and Conservation Plan for Coastal Watersheds	Full Project List	Prioritize planning and implementation projects on agricultural lands that address non-point source pollutants and the loss of riparian corridors. Integrate one or more agricultural BMPs such as irrigation efficiency
Floodplain and Riparian Enhancement Feasibility Plan for Arroyo Grande Creek	Full Project List	Design and implement floodplain projects in order to reduce downstream flooding and sediment loads, encourage groundwater infiltration, and expand riparian/ floodplain habitat.
Sustain SLO North: A Water Conservation Stewardship Plan for North County, San Luis Obispo	Full Project List	Considered planning application; considered regional (USLTRCD boundaries); would work well in a collaborative watershed planning proposal with a broader regional-scope.
Alternatives Analysis and BMP Implementation Plan for the Oso Flaco Watershed	Full Project List	NEED DESCRIPTION; Would work well in a collaborative watershed planning proposal with a broader regional-scope. Potential for collaboration with Cachuma RCD.
County-wide Fish Passage Barrier Evaluation	Watershed Management Planning Study (2013/14)	NEED DESCRIPTION; considered regional (each watershed in Region); would work well in a collaborative watershed planning proposal with a broader regional-scope; financial capacity unknown.
County-wide Approach to Understanding Instream Flow Needs	Completed (2013/14)	Help the SLO Region to better understand the instream flow needs of key species and environmental factors; improve the stakeholders' ability to better manage local water resources in a way that considers environmental stewardship.
WATER AND WASTEWATER TREATMENT		
Atascadero Lake Treatment System	Ongoing	Installs a treatment system for urban lake; improve water quality; provide opportunities for implementing stormwater and TMDL programs
Paso Robles Water Treatment Plant Project	2013 IRWM Project	Constructs a treatment plant to reliably deliver water that meets all drinking water standards to its customers and facilitates conjunctive use between Lake Nacimiento and groundwater supplies
San Miguel CSD Wastewater Treatment Expansion	Completed (2009)	Expand existing wastewater treatment plant capacity (influent lift station, four aeration ponds, three effluent percolation ponds, etc to comply with waste discharge requirements and ensure adequate capacity during storm events
Templeton CSD Wastewater System Expansion	2013 IRWM Project	Expands existing treatment plant (including AIPS ponds) to accommodate buildout flows, ensure waste discharge and stormwater programs compliance; adding additional storage ponds for wet weather storage.
Los Osos Community Wastewater Project	Ongoing; Construction underway	Partially funded by Prop 84 Implementation grant; Includes gravity wastewater collection system and tertiary treatment facility intended for water reuse in the Los Osos Groundwater Basin and habitat site restoration, and roadway improvement.
Lopez Water Treatment Plant Membrane Rack Addition	2013 IRWM Project	Involves the installation of additional membrane filter modules in the existing five membrane filtration racks and the construction of a new sixth membrane filtration rack to increase its filtration capacity to provide greater reliability.

Project Category and Title	2013 Project Status	Project Summary Statement
Cambria Pump Station	Full Project List	Construct a new storm water pump station and outlet structure to pump floodwaters from the lowest part of West Village directly into Santa Rosa Creek, significantly reduce flooding in the sump area of the West Village of Cambria.
Interceptor Sewer System Replacement, Oak Shores, CSA 7A	Full Project List	Construct new gravity sewerlines, 8 lift stations, manholes, pipe bridges, and pump systems to replace the Eastside and Westside Interceptor Sewer System.
Oceano Community Services District Water System Improvements	Full Project List	Provide various water system improvements to the community of Oceano, to improve water supply reliability and to improve water quality.
Lopez Pipeline Improvements	Full Project List	Optimize Lopez pipeline delivery capacity, working in conjunction with project to install additional membranes at the Lopez Water Treatment Plant to increase the overall capacity of the Lopez Project and to improve the water supply reliability.
San Miguel Community Services District Water System Improvements	2013 IRWM Project	Provide various water system improvements to the community of San Miguel, to improve water supply reliability and to improve water quality.
Chorro Valley Master Water and Waste Water Plan	Full Project List	NEED DESCRIPTION
WATER TRANSFERS		
Nipomo CSD Supplemental Water Project	Phased; Phase 1 under construction (2013)	3 phased project constructs treatment facilities and pipeline to ultimately transfer 3,000 acre feet of supplemental water per year from Santa Maria to Nipomo. Phases will increase water supply to 645 AFY, 1,600 AFY, and 3,000 AFY, respectively.

B. 2013 IRWM PLAN FULL PROJECT LIST

The table below includes all concepts and project/programs meeting the minimum requirements of an IRWM project. This Full Project List includes 37 relevant 2007 IRWM projects as well as 77 relevant and integrated 2013 project submittals. The list will be an appendix to the IRWM Plan, and will be updated on an as-needed basis (at a maximum of every two years). All projects included on this list are considered to be a part of the IRWM Plan and will be considered for future funding and implementation opportunities. The table includes the project title, sponsor, project category (e.g., concept, project or program) and primary IRWM benefit category. The sort order is first by Sub-Region or Multi-Regional category, then alphabetically.

Many of these project submittals contained opportunities for integration or consolidation. On October 16, 2013, the RWMG Working Group, Project Sponsors and Interested Stakeholders met to discuss the overall project solicitation process and results. The discussion resulted in identifying integration opportunities and developing an IRWM Plan project list. Following the meeting, the PMT combined this new integrated list with the 2007 IRWM Plan project list, as shown below.

If abstracts were integrated into one project, it will note which project submittals were combined under the column titled “project”. For example, the Central Coast Vineyard Team and Upper Salinas Las Tablas Resource Conservation District integrated two project submittals. Their combined project title now reads: “***Improving On Farm Water Management Through Demonstration, Research & Outreach of Precision Ag BMPs*** *(integrated 2 submittals: Tracking and Conserving Vineyard Irrigation Water in the Paso Robles Groundwater Basin; North County Precision Irrigation Research Program_ Precision Agriculture)”.*

IRWM Plan Update Full Project List (Grouped by Sub-Region)

(Titles followed by an asterisk (*) are Short List Projects)

Current or Prior Submittal	Projects	Sponsor	Sub-Region	Project or Concept?	Project Category
2013	Conservation Planning for Coastal Watersheds	Coastal San Luis Resource Conservation District	Multi-Regional	Concept	Ecosystem
2013	Agricultural Water Management and Conservation Program	Coastal San Luis Resource Conservation District	Multi-Regional	Concept	Water Management
2013	Closing Priority Conservation Data Gaps	Coastal San Luis Resource Conservation District	Multi-Regional	Concept	Ecosystem
2013	County-wide Watershed and Creek Signage	Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)	Multi-Regional	Project	Ecosystem/Water Management
2013	Countywide Watershed Planning Phase II	Coastal San Luis Resource Conservation District	Multi-Regional	Concept	Ecosystem
2013	Desalination Study	Various	Multi-Regional	Concept	Water Supply
2007	Development of Basic Salt & Nutrient Management Plans	Various	Multi-Regional	Concept	Groundwater
2013	Feasibility Study for Recycled Water for Agricultural Use	Coastal San Luis Resource Conservation District	Multi-Regional	Concept	Water Supply
2007	Federal Flood Insurance Program Compliance Study	San Luis Obispo County Flood Control and Water Conservation District	Multi-Regional	Concept	Flood
2007	Invasive Species Program	County of San Luis Obispo	Multi-Regional	Program	Ecosystem
2013	Livestock & Land Program*	Coastal San Luis Resource Conservation District (CSLRCD) and Upper Salinas Las Tablas Resource Conservation District (US-LTRCD)	Multi-Regional	Program	Ecosystem
2013	LID Pilot Program*	US-LTRCD	Multi-Regional	Program	Flood Management
2007	Mined Lands Remediation Program	San Luis Obispo County Flood Control and Water Conservation District	Multi-Regional	Program	Ecosystem
2013	Raising Santa Margarita Dam	Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS) (predecessor to future California Water District)	Multi-Regional	Concept	Water Supply/Groundwater
2013	Rancher 2 Rancher Program	Coastal San Luis Resource Conservation District	Multi-Regional	Concept	Water Management
2013	Regional Implementation of Groundwater Management Activities	Various (depends on basin)	Multi-Regional	Concept	Groundwater
2013	SLO Communities Water Enhancement	Central Coast Salmon Enhancement	Multi-Regional	Concept	Water Supply
2013	Stormwater Rewards Rebate Program	Coastal San Luis Resource Conservation District	Multi-Regional	Concept	Flood Management
2013	Urban Landscape Water Management and Conservation Program	Coastal San Luis Resource Conservation District	Multi-Regional	Project	Water Supply
2013	Water Conservation Corps	California Conservation Corps (CCC) – San Luis Obispo Center _ (Other Partners TBD)	Multi-Regional	Concept	Water Management
2007	Waterways Vegetation Management Program	San Luis Obispo County Flood Control and Water Conservation District	Multi-Regional	Program	Ecosystem
2007	Wetland and Vernal Pool Mapping	County of San Luis Obispo	Multi-Regional	Concept	Ecosystem
2013	8th Street Upper Aquifer Well and Nitrate Removal Facility*	Los Osos Community Services District	North Coast	Project	Water Supply/Groundwater
2007	Cambria CSD Water System Improvements	Cambria CSD	North Coast	Project	Water Supply
2007	Cambria Desalination Facility Project	Cambria CSD	North Coast	Project	Water Supply
2007	Cambria Pump Station	San Luis Obispo County Flood Control and Water Conservation District	North Coast	Project	Water Supply
2007	Chorro and Morro Groundwater Basin Management Plans	Morro Bay National Estuary Program	North Coast	Concept	Groundwater
2013	Chorro Creek Ecological Reserve Floodplain Restoration Project	Morro Bay National Estuary Program	North Coast	Project	Ecosystem
2007	Chorro Valley Master Water and Waste Water Plan	City of Morro Bay	North Coast	Concept	Water Supply
2013	Cambria Pump Station	County of San Luis Obispo, Department of Public Works	North Coast	Project	Groundwater/Flood Management
2013	Conservation Planning for North Coast Landowners	US-LTRCD	North Coast	Project	Water Supply
2013	County Service Area 10 – Clearwell Tank Roof Replacement	San Luis Obispo County Flood Control & Water Conservation District	North Coast	Concept	Water Management
2013	County Service Area 10A Water System Improvements (Integrates 2 submittals: New 200k Gallon Storage Tank; and Storage Tank Roof Replacement)	San Luis Obispo County Flood Control & Water Conservation District	North Coast	Concept	Water Supply
2007	Los Osos Community Stormwater Master Plan	Los Osos CSD	North Coast	Concept	Flood

Current or Prior Submittal	Projects	Sponsor	Sub-Region	Project or Concept?	Project Category
2013	Los Osos Landfill Remediation – Pump and Treat	County of San Luis Obispo	North Coast	Concept	Groundwater
2007	Los Osos Water System Improvements	Los Osos CSD	North Coast	Project	Water Supply
2013	Los Padres CCC Center – Stormwater LID Treatment Project*	Morro Bay National Estuary Program	North Coast	Project	Flood Management
2013	Morro Bay_Cayucos Sanitation District Salt and Nutrient Management Plan	City of Morro Bay	North Coast	Project	Groundwater
2007	Morro Bay NPDES Illicit Discharge Detection and Elimination Ordinance	City of Morro Bay	North Coast	Concept	Water Supply
2007	Morro Bay Wastewater Treatment Facility Upgrade	City of Morro Bay	North Coast	Project	Water Supply
2013	North Coast Watershed Plans	US-LT RCD	North Coast	Project	Ecosystem
2013	Rehabilitation_Installation of Retention Ponds in North Coast (store & release)	US-LTRCD	North Coast	Concept	Groundwater
2013	S&T Mutual Water Co_Golden State Water Co Intertie	S&T Mutual Water Company	North Coast	Concept	Water Supply
2007	San Simeon CSD Water System Improvements	San Simeon CSD	North Coast	Project	Water Supply
2007	San Simeon Small Scale Recycled Water Project	San Simeon CSD	North Coast	Project	Water Supply
2007	San Simeon Wastewater Treatment Facility Upgrade	San Simeon CSD	North Coast	Project	Water Supply
2013	SLO County Drought Protection & Climate Change Preparedness Pilot Project	GREENSPACE – The Cambria Land Trust	North Coast	Concept	Water Management
2013	Streambank Stabilization & Restoration in Santa Rosa Creek	US-LTRCD	North Coast	Project	Ecosystem
2013	Water Conservation Partnerships in Chorro Valley	Morro Bay National Estuary Program	North Coast	Concept	Ecosystem
2013	Attiyeh Ranch Conservation Easement*	Land Conservancy	North County	Project	Ecosystem
2013	21st Street Reservoir Reconstruction	City of Paso Robles	North County	Project	Ecosystem
2013	Atascadero Creek Watershed Management Plan	City of Atascadero	North County	Concept	Flood Management
2007	Atascadero Lake Treatment System	City of Atascadero	North County	Project	Ecosystem
2007	Atascadero Wastewater System Upgrade	City of Atascadero	North County	Project	Water Supply
2007	Attiyeh Ranch Conservation Easement Project	Land Conservancy of SLO	North County	Project	Ecosystem
2013	City of Paso Robles Lake Nacimiento Water Treatment Plant Construction*	City of Paso Robles	North County	Concept	Water Supply
2013	Community Based Social Marketing – Paso Groundwater Basin Community (water quality & quantity)*	US-LTRCD	North County	Project	Water Management
2013	County Service Area 23 (CSA 23) Water Reliability Program	County of San Luis Obispo – Public Works Dept	North County	Concept	Water Supply
2013	County Service Area 7A – Oak Shores – Interception Sewer System Replacement	County of San Luis Obispo	North County	Concept	Water Supply
2013	Creston State Water Project Turnout	Requires formation of Water Purveying Entity	North County	Concept	Water Supply
2013	CSA 16 (Shandon) Water System Improvements (integrate 4 submittals: **Waterline** – Replace Centre Street; Waterline – Upsize 1st Street; Waterline Loop N. 2nd to N. 3rd Streets; New Storage Tank)	San Luis Obispo County Flood Control & Water Conservation District	North County	Concept	Water Supply
2013	CSA 16 (Shandon) Water Reliability Project	County of San Luis Obispo	North County	Concept	Water Supply
2013	Emergency Water Turnout for Heritage Ranch CSD	Heritage Ranch CSD	North County	Project	Water Supply
2013	Evaluating land-surface subsidence and potential groundwater-storage losses as part of assessing proposed water banking sites in Paso Robles Groundwater Basin	USGS	North County	Concept	Groundwater
2013	Groundwater Monitoring Program and Modeling Program for the Paso Robles Groundwater Basin	Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS) (predecessor to future California Water District)	North County	Concept	Groundwater

Current or Prior Submittal	Projects	Sponsor	Sub-Region	Project or Concept?	Project Category
2013	**Improving On Farm Water Management Through Demonstration, Research & Outreach of Precision Ag BMPs*** (integrated 2 submittals: Tracking and Conserving Vineyard Irrigation Water in the Paso Robles Groundwater Basin; North County Precision Irrigation Research Program_ Precision Agriculture)	Vineyard Team & US-LTRCD	North County	Project	Water Supply
2007	**Interlake Tunnel Project**	Nacimiento Regional Watershed Management Advisory Committee	North County	Project	Water Supply
2013	**Nature Center & Conservation Hub**	US-LTRCD	North County	Concept	Water Management
2013	**North County Fertilizer Regions_ Precision Agriculture***	US-LTRCD	North County	Program	Ecosystem
2013	**North County Strategic Plan**	Institute for Advanced Technology & Public Policy, Cal Poly, San Luis Obispo	North County	Concept	Groundwater
2013	**Off Stream Storage within the North County**	Paso Robles Agricultural Alliance for Groundwater Solutions (PRAAGS) (predecessor to future California Water District)	North County	Concept	Groundwater
2013	**Phase 2 – Lake Nacimiento Potable Water Treatment Plant**	City of Paso Robles	North County	Project	Groundwater
2007	**Pilot Project Impact of Santa Margarita Lake Discharges on Groundwater Basin**	Unknown	North County	Concept	Groundwater
2013	**Recycled Water Treatment and Distribution System – Phase 1**	City of Paso Robles	North County	Concept	Groundwater
2013	**Recycled Water Treatment and Distribution System – Phases 2_3**	City of Paso Robles	North County	Concept	Groundwater
2007	**San Miguel CSD Water System Improvements***	San Miguel CSD	North County	Project	Water Supply
2013	**San Miguel Flood Control Program**	San Luis Obispo County Flood Control and Water Conservation District	North County	Concept	Flood Management
2013	**Supplemental Water Supplies for Paso Robles Groundwater Basin** (integrates 5 submittals: Community Water Systems for Subdivided Regions Overlying the Paso Robles Groundwater Basin; Irrigation Distribution System at Paso Robles Airport Area; Paso Robles Groundwater Basin Restoration and Basin Recharge; Paso Robles Groundwater Basin In-Lieu Recharge Study and Preliminary Layout)	TBD	North County	Concept	Water Supply
2007	**Sustain SLO North: A Water Conservation Stewardship Plan for North County, San Luis Obispo**	US-LTRCD	North County	Concept	Water Supply
2013	**Templeton CSD East Side Force Main and Lift Station Project**	Templeton CSD	North County	Project	Water Supply/Groundwater
2007	**Templeton CSD Water System Improvements**	Templeton CSD	North County	Project	Water Supply
2013	**Toad Creek flood control, restoration and basin re-charge**	US-LTRCD	North County	Project	Flood Management
2013	**Toad Creek Waterway Management Program**	SLO County Flood Control and Water Conservation District	North County	Concept	Ecosystem/Flood Management
2013	**Upper Salinas River Basin Water Conservation/Conjunctive Use Project***	Templeton CSD	North County	Concept	Water Supply
2013	**Upper Salinas Watershed Plans**	US-LTRCD	North County	Project	Ecosystem
2013	**Vertical Well Project for HRCSD**	Heritage Ranch CSD	North County	Concept	Water Supply
2013	**Water-wise program (with target applied irrigation rates)**	US-LTRCD	North County	Project	Water Supply

Current or Prior Submittal	Projects	Sponsor	Sub-Region	Project or Concept?	Project Category
2013	**Alternatives Analysis and BMP Implementation Plan for the Oso Flaco Watershed**	Coastal San Luis Resource Conservation District	South County	Concept	Ecosystem
2013	**Arroyo Grande Creek Channel Waterway Management Program**	San Luis Obispo County Flood Control and Water Conservation District, Central Coast Salmon Enhancement	South County	Project	Flood Management
2007	**Avila Beach Wastewater System Upgrade**	Avila Beach CSD	South County	Project	Water Supply
2013	**Beach Street Alley Waterline Replacement**	Oceano Community Services District	South County	Project	Water Supply
2013	**Conjunctive Use and Groundwater Banking Evaluation**	Oceano Community Services District	South County	Concept	Groundwater
2007	**Edna Valley Groundwater Basin Study**	Various	South County	Concept	Groundwater
2007	**Flood Control Zone 1/1A Waterway Management Program**	San Luis Obispo County Flood Control & Water Conservation District	South County	Program	Flood
2013	**Flood Control Zone 3 – Lopez WTP Sludge Bed 1 & 2 Upgrades**	San Luis Obispo County Flood Control & Water Conservation District	South County	Concept	Water Supply
2013	**Floodplain and Riparian Enhancement Feasibility Plan for Arroyo Grande Creek**	Coastal San Luis Resource Conservation District	South County	Concept	Flood Management
2013	**Lopez Lake Spillway Raise Project**	Zone 3 Agencies (Cities of Arroyo Grande, Grover Beach and Pismo Beach, Oceano Community Services District and County Service Area 12)	South County	Concept	Water Supply
2013	**Lopez Pipeline Improvements**	Northern Cities Management Area (NCMA) Agencies: Oceano Community Services District (OCSD)_ City of Arroyo Grande_ City of Grover Beach_ City of Pismo Beach	South County	Concept	Water Supply
2013	**Lopez Water Project Habitat Conservation Plan**	San Luis Obispo County Flood Control and Water Conservation District	South County	Project	Ecosystem
2013	**Lopez Water Treatment Plant Membrane Rack Addition***	San Luis Obispo County Flood Control and Water Conservation District	South County	Concept	Water Supply/Groundwater
2013	**Mapping the saltwater_freshwater interface in southern San Luis Obispo and northern Santa Barbara County, California**	USGS	South County	Concept	Groundwater
2013	**Meadow Creek Restoration Plan** (integrates: Meadow Creek Flood Reduction)	Central Coast Salmon Enhancement (and Coastal San Luis RCD)	South County	Concept	Ecosystem
2013	**Mid-Higuera Bypass**	City of San Luis Obispo	South County	Project	Flood Management
2013	**Nacimiento Water Project Energy Recovery Turbine**	City of San Luis Obispo	South County	Concept	Water Management
2007	**Nipomo Area Water Reuse Plan**	Nipomo CSD	South County	Concept	Water Supply
2007	**Nipomo CSD Supplemental Water Project**	Nipomo CSD	South County	Project	Water Supply
2007	**Oceano Community Services District Water System Improvements**	Oceano CSD	South County	Project	Water Supply
2013	**Oceano Drainage Improvement Project – Hwy 1 & 13th Street***	County of San Luis Obispo, Department of Public Works	South County	Project	Flood Management
2007	**On-Farm Water Quality Enhancement and Conservation Plan for Coastal Watersheds**	CSLRCD	South County	Concept	Water Supply
2013	**Pismo Beach Recycled Water Treatment Plant***	City of Pismo Beach	South County	Project	Groundwater
2013	**Pismo Creek Watershed Program**	Central Coast Salmon Enhancement	South County	Concept	Ecosystem
2013	**Recycle Water Distribution System Expansion***	City of San Luis Obispo	South County	Project	Water Supply
2007	**Recycled Water Master Plan Update**	City of San Luis Obispo	South County	Concept	Water Supply
2013	**Regional Recycled Water System (Pismo Beach and SSLOCSD)** (integrates Pismo Beach Recycled Water System)	City of Pismo Beach	South County	Concept	Groundwater
2007	**San Miguelito Wastewater System Upgrade**	San Miguelito MWC	South County	Project	Water Supply
2013	**Santa Maria Groundwater Basin Model**	NCMA Agencies (Oceano Community Services District, Cities of Arroyo Grande, Grover Beach and Pismo Beach), Nipomo CSD	South County	Concept	Groundwater
2013	**See Canyon Watershed Management Plan**	Central Coast Salmon Enhancement	South County	Concept	Ecosystem
2007	**Southland Wastewater Treatment Facility Upgrade**	Nipomo CSD	South County	Project	Water Supply
2007	**Steelhead 4(d) Program**	Central Coast Salmon Enhancement	South County	Program	Ecosystem

D. 2013 IRWM PLAN SHORT PROJECT LIST

The Short Project List is an inventory of all projects and programs submitting a Long Form under the Phase 2 solicitation process. Concepts and/or projects that have a lower "readiness-to-proceed" are included in the Full Project List (Section B), but were not asked to submit a Long Form for consideration in the Short Project List below.

The Short Project List of projects identifies those projects/programs that are technically feasible and strategically suited to be fully described in the IRWM Plan. Projects listed in grey below submitted long forms, which will be included in the IRWM Plan update appendix; however due to reason stated in the table, that project does not have enough data or does not address enough objectives (per State Guidelines) to adequately incorporate information throughout the IRWM Plan update itself. That differentiation does not note a project as being less significant. It simply means that the project will not be incorporated into various IRWM Plan sections. All projects will still remain on the Full Project List, and are considered to be supported by this IRWM Plan.

A detailed project analysis compiled as a Project Review White Paper (PWP)[4] evaluated each project's strategic value in meeting the State Objectives and Resource Management Strategies, as well as the IRWM Plan's Water Management Strategies, and its Goals and Objectives. The PWP is a resource document developed for purposes of documenting detailed material to be used in populating the various IRWM Plan sections.

PFRNo.	Project Code	Project Title	Primary Reason for In or Out of IRWM Plan
1	**MLTP_ECO1**	Livestock & Land Program	Included for its multi-objective regional benefits and water quality enhancement while gaining private property owner volunteer participation for purposes of environmental stewardship.
	MLTP_FLD1	Water Conservation Corps	Not included due to low RTP.
	MLTP_WMT1	County-Wide Watershed Awareness Campaign	Not included due to medium RTP and lower total Objectives-based point score.
2	**MLTP_WMT2**	LID Pilot Program	Included for its public education and outreach, as well as targets private property owners to volunteer and pay for LID projects with monetary rebate incentives.
3	**NCNT_ECO1**	North County Fertilizer Regions_ Precision Agriculture	Included for its wide public educational value and regional water quality benefits through volunteer participation by private property owners with reduced fertilizer cost incentives.
4	**NCNT_ECO2**	Attiyeh Ranch Conservation Easement	Included for public and environmental stewardship values; both resulting in the protection of the watershed and endangered flora and fauna species in the region.
	NCNT_FLD1	Upper Salinas watershed plans	Not included due to medium RTP.
5	**NCNT_GWM1**	Atascadero Groundwater Basin Augmentation Expansion Project	Included because of the multi-objective elements of improving recycled wastewater for higher beneficial use as a source for groundwater recharge and potable supplies in the Salinas Underflow.

PFRNo.	Project Code	Project Title	Primary Reason for In or Out of IRWM Plan
6	**NCNT_WMT1**	Community Based Social Marketing	Included due to its low cost high education value over a broad region, enlisting support of private property owners to take ownership of their environment, and improving sustainable farming and business practices.
7	**NCNT_WMT2**	Improving On Farm Water Management Through Demonstration, Research & Outreach of Precision Agricultural Best Management Practices	The project is a teamed effort by two project sponsors. Included for its high public educational value and regional water demand reduction benefits over a critically impacted groundwater basin, and offers change in irrigation practices through volunteer participation by private property owners with reduced pumping cost incentives.
8	**NCNT_WSP1**	City of Paso Robles Lake Nacimiento Water Treatment Plant Construction	Included due to its maximizing existing supplemental water supplies in a critically impacted groundwater basin, and use as a conjunctive supply for drought protection and effects of climate change in the region.
9	**NCNT_WSP2**	San Miguel Critical Water System Improvements	Included due to the DAC need for critical water system improvements.
	NCST_ECO1	Water Conservation Partnerships in Chorro Valley	Not include due to low RTP and low total Objectives-based point score.
10	**NCST_GWM1**	8th Street Upper Aquifer Well and Nitrate Removal Facility	Included for its multi-Objective values of managing a critical groundwater basin subjected to continuous degradation of water quality from septic systems (nitrates) and sea water intrusion, and the local collaboration between the agencies and public using a vetted management plan.
11	**NCST_FLD1**	Los Padres CCC Center - Stormwater LID Treatment Project	Included for its multi-Objective benefits of environmental stewardship, LID educational opportunities, and the conversion of private lands to restore a rich ecosystem of flora and fauna.
	SCNT_FLD1	Mid-Higuera Bypass	Not included due to its medium RTP and low Objectives point score.
12	**SCNT_FLD2**	Oceano Drainage Improvement Project - Hwy 1 & 13th Street	Included due to multi-Objective elements of providing a DAC with health and safety along with water quality, groundwater recharge, and flood attenuation.
13	**SCNT_WMT1**	Lopez Water Treatment Plant Membrane Rack Addition	Included due to increased use of existing surface water supplies and reduction in groundwater use in a constrained groundwater basin shared by multiple agencies and private well owners.
	SCNT_WSP1	Lopez Lake Spillway Raise Project	Not included due to low RTP.
14	**SCNT_WSP2**	Recycle Water Distribution System Expansion	Included due to increased recycled water use in a DAC with the benefit of reducing groundwater pumping in a constrained groundwater basin.
	SCNT_WSP3	NCMA_NMMA Salt and Nutrient Management Plan (SNMP)	Not included due to medium RTP.
15	**SCNT_WSP4**	Pismo Beach Recycled Water Project	Included due to increased recycled water use through construction of a recycled water treatment plant. Recycled water will be made available in a constrained groundwater basin where imported surface water supplies are necessary. A high level of support from local stakeholders makes this a preferred project for the South County Sub-Region.

Geographic significance of project selection is considered in project selection to ensure each Sub-Region is equally represented in the IRWM Plan. The figure in **Attachment 1** identifies the approximate location of the capital projects, and programs, typically spread across large areas, are positioned at the approximate center of the benefit areas.

E. NEXT STEPS

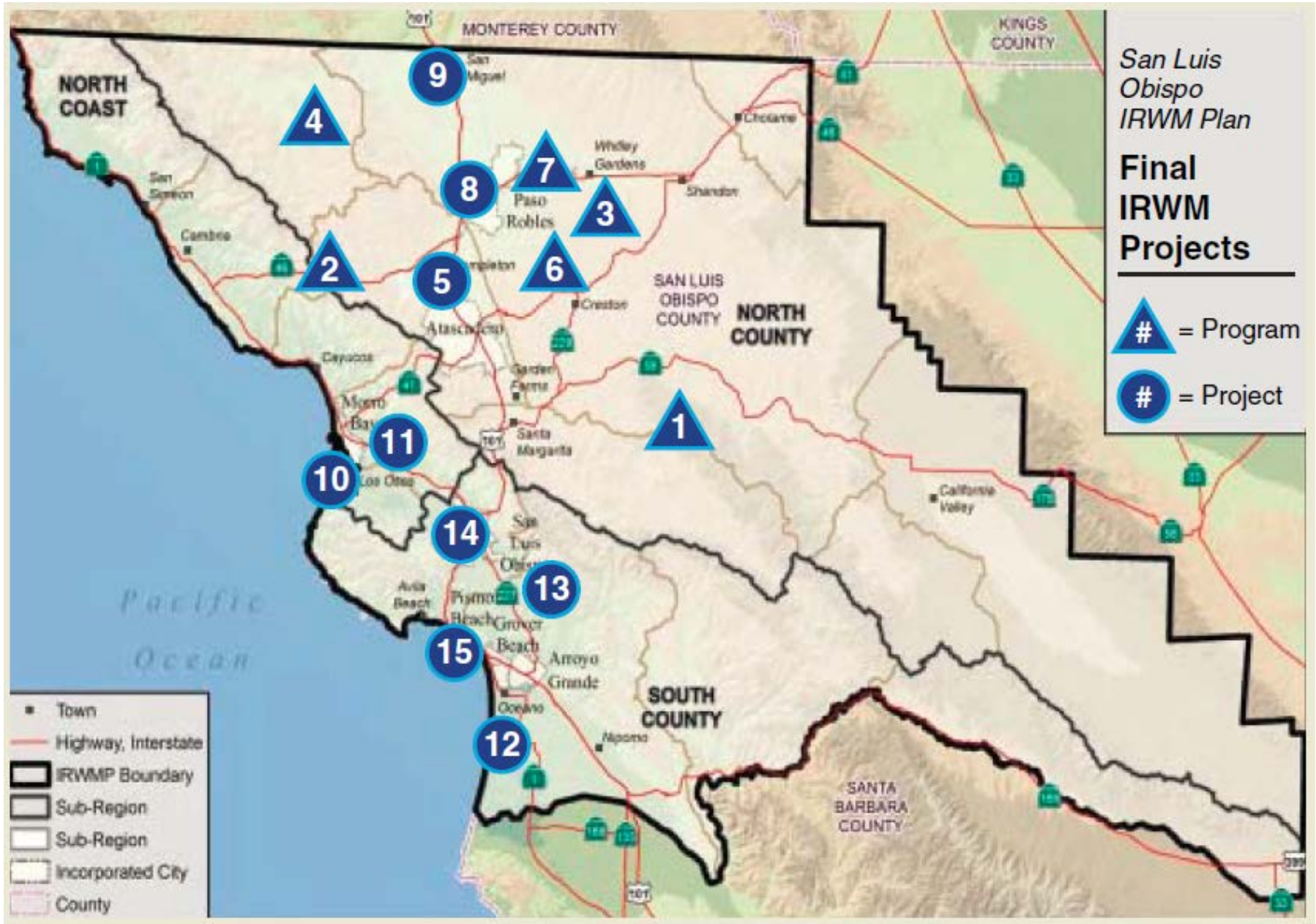
Upon receipt of all comments on November 26, 2013, the PMT will develop a Final Brochure to convey the results (and changes per RWMG review) to the RWMG. This will allow the PMT to incorporate project data into the complete Administrative Draft IRWM Plan by January/February and the Public Draft IRWM Plan by March/April. The RWMG and stakeholders can expect to receive the brochure electronically by December 4, 2013. The clear documentation of project review and selection is pivotal to meeting DWR requirements, and ensures acceptance of the IRWM Plan by the region's stakeholders upon final completion and adoption by the County Board of Supervisors and RWMG Member Agencies in June 2013.

ATTACHMENTS

1 - Map of 2013 IRWM Plan Short Project List Locations

2 - 2013 IRWM Plan Short Project List: Summary of Project Elements

ATTACHMENT 1 - Map of 2013 IRWM Plan Short Project List Locations



ATTACHMENT 2 - 2013 IRWM PLAN SHORT PROJECT LIST: SUMMARY OF PROJECT ELEMENTS

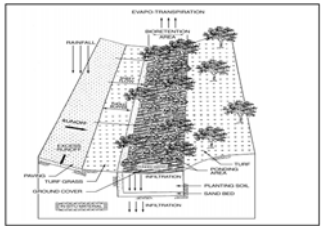
The following table of Project Technical Descriptions serves as a summary of the Project Elements, defined in the IRWM Plan as:

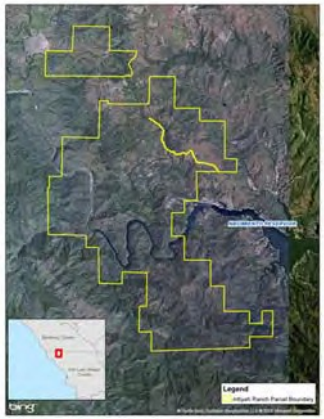
> *Project Elements are "building blocks" of region-specific activities derived from a thorough evaluation of the State's Resource Management Strategies (RMS) (**Section G – Resource Management Strategies**), and applied local Water Management Strategies (WMS), which consist of activities to promote the Goals and Objectives (**Section C –Goals and Objectives)** of the Updated Plan.*

The overlap of Project Elements amongst the selected projects illustrates the types of activities targeted for the IRWM region. The value of this understanding can further shape the high value projects or create additional and perhaps integrated projects where Project Elements are applied to several projects under one project/program umbrella. The synergism of combining related projects and sharing in the resources and learning from the combined efforts, are available if project sponsors want to improve the opportunity for outside funding. Additional detail for these opportunities and more information on each project is provided in the PWP.

SELECTED PROJECT TECHNICAL DESCRIPTIONS

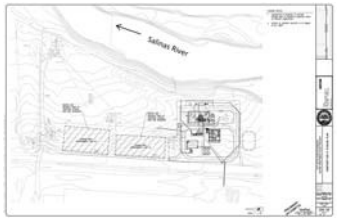
Project Title	Type	Project Elements	Technical and Strategic Summary
Livestock & Land Program 	Educational Program	• Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater. • Provide cost-effective alternatives to private property owners in managing on-site sources of contamination.	The Livestock and Land (L&L) Program addresses natural resource concerns faced by livestock owners by providing education, technical assistance and cost share for implementation of management measures. Water quality improvements will be achieved by giving livestock owners the tools to complete water quality site assessments and to implement Best Management Practices near listed waterways. The behavioral and management practice changes achieved by this program will provide immediate and lasting water quality and watershed improvements by reducing the off-site mobilization of manure, urine and sediments from livestock facilities. The program will make significant progress toward watershed goals listed in TMDLs and watershed plans.

Project Title	Type	Project Elements	Technical and Strategic Summary
LID Pilot Program 	Educational Program with Installation Drainage Devices to Optimize Irrigation and Groundwater Recharge	• Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams. • Provide cost-effective alternatives to private property owners in managing on-site sources of contamination. • Attenuate storm flows by increasing private property on-site retention and detention controls. • Provide public incentives to gain volunteer change in on-site water use and handling practices.	The Low Impact Development "Soak It Up" Rebate Program (Program) provides private property landowners in the North Coast and North County Sub-Regions rebates of up to 60% of the costs to install Low Impact Development (LID) features. The Program will include an education and outreach program available to all County residents regarding stormwater impacts of development and ways to reduce them. The US-LTRCD will provide free landscape assessments for property owners to determine appropriate LID strategies that can be implemented in order to reduce stormwater runoff and contamination. The property owner will receive a landscape assessment with site appropriate LID recommendations and plans. The property owner can build all or a portion of the LID features; and will pay for all costs of the installation. Those homeowners who build the features as per plan, pass an inspection, and sign a 10 year maintenance agreement with the RCD, can apply and receive up to 60% of the total project cost. The development of a LID grant program for private landowners will implement elements of local watershed plans with installation emphasis in severely drought affected watersheds, such as the Salinas River, Santa Rosa Creek, and San Simeon Creek. Strong support exists from both the civic community and the environmental community.
North County Fertilizer Regions_ Precision Agriculture 	Education Program with Changes in Fertilizing Practice	• Provide cost-effective alternatives to private property owners in managing on-site sources of contamination. • Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater.	This project produces nutrient management recommendations based on fertilizer regions in the North County. Regions are identified using soil characteristics, since they have the most effect on nutrient management. Agricultural sites are chosen from applicants in these regions and three different packages of nutrient management BMPs and fertilizer programs will be implemented at each of 5 locations. The costs and benefits of the treatments will be compared and reported to interested parties, and demonstrated to the public through RCD-developed workshops and tailgate style demonstrations. BMP's and nutrient management programs will be evaluated by measuring soil and water nutrient concentrations before and after treatments are implemented. Recommendations will be based on economic, agricultural and environmental factors. Maps, recommendations and management plans will be created to be shared with the public.

Project Title	Type	Project Elements	Technical and Strategic Summary
Attiyeh Ranch Conservation Easement 	Conservation Easement for the Protection of Lands in Perpetuity	• Create and preserve natural ecosystems and protect endangered flora and fauna through Land Stewardship and Conservation Easement programs. • Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater.	Easement to protect against land uses to ensure the land is managed consistent with the project goals. Land use impacts without the easement include: • Subdivision • Construction of houses or other structures • Waste dumps • Grading and soil dumping • Surface and/or subsurface mineral development • Installation of new above-ground utility systems, including, without limitation, water, sewer, power, fuel, and communication lines and related activities and equipment, except for systems servicing permitted agricultural uses on the ranch and existing structures • Cutting or removal of native trees, shrubs, or other vegetation, except for continued reasonable land management purposes, and as may be necessary for elimination of diseased growth, fire protection, and similar protective measures, and to protect human safety

Project Title	Type	Project Elements	Technical and Strategic Summary
Atascadero Groundwater Basin Augmentation Expansion Project  	Recyled Water Use, Groundwater Recharge, and New Potable Supplies	• Develop and improve water and wastewater treatment facilities to reduce point source discharges of contaminants to natural streams. • Develop and Improve methods of water reuse within a community.	The Templeton Community Services District (TCSD) currently utilizes two wastewater treatment and disposal options. Approximately 220,000 gpd are sent to the Paso Robles WWTP for treatment and disposal directly to the Salinas River, and the remainder of effluent (150,000 gpd) is treated by the TCSD Meadowbrook WWTP and discharged at the Selby Ponds where the treated wastewater percolates into the shallow aquifer system and the Salinas River underflow (highly transmissive soils underlying the Salinas River laid down over time). The TCSD already has the permitted capacity to treat 600,000 gpd of wastewater at its Meadowbrook WWTP and discharge the treated wastewater at the Selby Ponds, inclusive of the redirected 220,000 gpd, per existing WDR Order No. R3- 2007-0029. The proposed Atascadero Groundwater Basin Augmentation Expansion Project proposes to utilize the entire wastewater generated by the TCSD to augment local groundwater supplies for beneficial use within the community. The project has a number of distinct components that make up the entire project. For ease of explanation, they are broken down below as follows: **East Side Force Main and Lift Station Project (ESFM Project):** • Cessation of conveyance by TCSD of any wastewater to the Paso Robles WWTP where the treated wastewater is discharged to the Salinas River; • The Templeton Community Services District (TCSD) proposes to re-route the treatment and disposal location. Pipeline construction along a 2.4 mile corridor; Concurrently with the planning and development of the East Side Force Main and Lift Station Project (ESFM Project), the Meadowbrook WWTP is undergoing intensive study and evaluation to optimize the treatment and quality of the effluent. Once the new lift stations and force mains are completed, the operation of the Meadowbrook WWTP will be operating under optimum conditions. The goal is to insure that the highest quality water is percolated into the groundwater basin. Tertiary treatment at the WWTP will also be added to provide an additional level of treatment required to improve the percolation rates, meet future recycled water needs within the basin, and to meet anticipated regulatory requirements. While current and future flow estimates are considered in the design of the West Side Lift Station, actual facility operations and equipment are to be upgraded to meet the increase in wastewater flows. The West Side Lift station, as well as the collection system downstream of the discharge point (Peterson Ranch Rd.) of the Project will be upgraded to accommodate current and planned future wastewater flows. The Meadowbrook WWTP currently utilizes a manual bar screen to prevent large debris from entering the AIPS pond system. An improvement in screening will improve the overall performance of the plant by preventing a larger percentage of inorganic debris from entering the process and increasing employee safety. This component will ensure system reliability, regulatory compliance and assist in meeting water quality objectives.

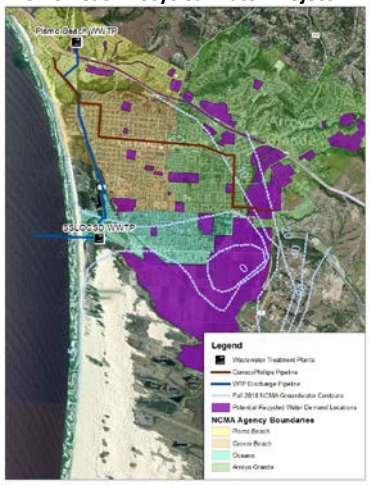
Project Title	Type	Project Elements	Technical and Strategic Summary
Community Based Social Marketing	Educational Program	• Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater. • Provide cost-effective alternatives to private property owners in managing on-site sources of contamination. • Provide public incentives to gain volunteer change in on-site water use and handling practices.	Severe water supply shortages and TMDL listings show that residents in the Paso Robles Groundwater Basin require urgent outreach to bring an understanding of how residents can participate in creating solution-oriented behavior changes for water conservation and basin sustainability. The US-LTRCD plans to implement a community-based social marketing campaign (CBSM) to address water quality as well as quantity. This pragmatic approach involves an interactive program identifying the barriers to a behavior that is debilitating to the Paso Robles Basin, developing dynamic and synergistic programs (and/or existing programs) to overcome these barriers, implementing an interactive program of education and outreach across the communities within the basin area and then evaluating the effectiveness of the program by tracking and establishing if behavior changes have occurred. The more direct involvement with the communities in the Paso Robles Basin area, the more we will foster more sustainable behavior. By developing and implementing this program, individuals, businesses and the agricultural community will be educated on the cause/effect relationship with actions within the homes and within business and farm practices that harm and deplete the area's water supply. This education will be paired with practical ways on how these behaviors can be modified to directly support the mission of reducing greenhouse gas emissions, water conservation and preservation while positively impacting climate change.
North County Precision Irrigation Research Program_ Precision Agriculture 	Education Program with Reductions in Irrigation Water Use	• Provide public education in the value of conserving water for purposes of achieving sustainable surface water and groundwater drinking water supplies. • Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater.	Irrigated agriculture is a large user of water and energy in San Luis Obispo County. This program develops benchmarks for energy and water conservation by identifying through pump efficiency and irrigation distribution uniformity analysis poorly performing irrigation systems. Applications will be accepted from growers willing to cost share system components, adjust management practices, and share findings and conclusions with the public. The Center for Irrigation Technology and Advanced Viticulture will aid in experimental design and control. Soil moisture meters and weather stations will be installed on 5 North County sites. The sites will be monitored for 2-3 growing seasons, and system performance evaluated by changes in crop yields, and water and energy use. The findings of this project will be made available to the public by reports, website outreach, and workshops generated by the US-LTRCD, Vineyard Team and Stockman's Energy. Growers who receive the systems will be able to keep the equipment, but will be required to pay for any ongoing costs after the research has been completed.

Project Title	Type	Project Elements	Technical and Strategic Summary
City of Paso Robles Lake Nacimiento Water Treatment Plant Construction 	New Water Treatment Plant	• Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Implement groundwater management projects to improve the quality and quantity of groundwater in accordance with a regional stakeholder-based groundwater basin plan.	The City of Paso Robles currently relies on water from two sources: Salinas River underflow wells and groundwater from the deeper formation of the Paso Robles Groundwater Basin. Significant groundwater level declines in City wells and other basin wells have been occurring since the 1990's. San Luis Obispo County has certified the basin as a Level of Severity III, indicating the demand for water will equal or exceed its supply before supplemental supplies can be developed. The Lake Nacimiento Water Treatment Project will provide additional potable water for the City of Paso Robles, enabling the City to reduce groundwater pumping within the overdrafted Paso Robles Groundwater Basin. City of Paso Robles water deliveries for 2005 and 2010 were 7,163 acre-feet per year (AFY) and 5,749 AFY, respectively. Water deliveries in 2010 were much lower than 2005 deliveries because of mandatory City- wide outdoor water use restrictions implemented in 2009. Level 2 of the City's Water Conservation Ordinance and Water Shortage Contingency Plan (See Attachment) was implemented to reduce summer peak water demands and thereby manage a projected water production shortfall of 20 percent. These restrictions will be lifted when the Lake Nacimiento surface water supply becomes usable by Paso Robles. As the projected customer water deliveries are expected to increase to 12,460 AFY in 2035 (2010 UWMP). City is committing to 4,000 AFY initially.
San Miguel Critical Water System Improvements 	System Improvements Including Backup New Generators	• Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Seek outside funding for water and flood control projects in low income areas	This project is seeking construction of six of the highest priority, critical water supply projects as listed below. The District needs to implement all six of these identified projects in the immediate future, or they will be faced with continued deterioration of an already deficient water system, and may not be able to support even limited beneficial growth with the identified deficiencies that face the District's water system. 1. **New Fire Hydrants and Wharf Head Replacements** – Thirteen (13) new fire hydrants to replace inadequate and aging hydrants. 2. **Well 3 Rehabilitation** - Well 3 is over 40 years old and requires upgrades in the well motor housing, disinfection system, electrical wiring, backup power generation and the protective structural building. 3. **New Water Well Siting Study** – Respond to the urgent need of replacing the San Lawrence Terrace Well, taken out of service because of high arsenic concentrations, and providing water supply redundancy in the event of an emergency shutdown of any three existing wells. 4. **Emergency Backup Power** – Equip Well 3 and Well 4 with power generators in the event of power failures to maintain a minimum supply of water during widespread power outages. 5. **New Water Storage Tank** – Construct the San Lawrence Terrace Water Storage Tank with 0.25 million gallons for capacity and water quality improvements. 6. **12th and K Street Water Main Upgrades** – Replace old and undersized piping at 12th Street and K Street.

Project Title	Type	Project Elements	Technical and Strategic Summary
8th Street Upper Aquifer Well and Nitrate Removal Facility 	New Treatment and Supply Well Facilities	• Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Develop new groundwater management projects to improve the quality and quantity of groundwater in accordance with a regional stakeholder-based groundwater basin plan.	The Los Osos Community Services District (LOCSD) is proposing to construct a new upper aquifer well and nitrate removal system at an existing water well facility in the community of Los Osos. The project includes installation of a new well with well pump, ion-exchange nitrate removal skid-mounted treatment system, pre-manufactured 600 square foot metal building, 5,000 gallon High Density Polyethylene (HDPE) tank, and various piping to connect the site's existing facilities to the new structures. The new well will be approximately 125 feet deep and it is estimated that the pumping capacity will be 150 gallons per minute (150 AFY). The new well will be drilled adjacent to the existing lower aquifer well at the 8th Street and El Moro Street Utility Water Yard location. Both the new and existing well heads will be enclosed in a new pre-engineered metal warehouse building along with the nitrate removal treatment equipment. The existing wellhouse for the lower aquifer will be demolished. Water from the new well will be pumped through the nitrate removal facility and then piped to the main LOCSD water distribution system. Brine from the nitrate removal ion exchange unit will be stored in a 5,000 gallon tank adjacent to the wellhouse building and periodically trucked offsite to an approved disposal facility. Based on the capacity of the new well pump, it is estimated that the brine tank will need to be drained approximately four (4) times per week. On August 5, 2008, the Court approved an Interlocutory Stipulated Judgment (ISJ) between LOCSD, Golden State Water Company, S&T MWC and the County. The ISJ formed a Working Group with the purpose of researching the current condition and uses of the Los Osos Groundwater Basin, and adopting a Basin Management Plan (Basin Plan) to resolve conflicting claims related to Basin water resources. The Basin Plan is the result of those efforts and is intended to fulfill the obligations of the Parties pursuant to the ISJ. As a member of the ISJ Working Group, LOCSD has identified certain projects that provide an overall benefit to the groundwater basin. This project will ultimately benefit all Water Purveyors in the Los Osos Basin (Golden State Water Company, S&T Mutual Water Co. and LOCSD) by reducing the pumping on the Lower Aquifer and increasing the production from the Upper Aquifer, which will help reduce sea water intrusion and reduce the risks to each of the water purveyor's water supply wells.

Project Title	Type	Project Elements	Technical and Strategic Summary
Los Padres CCC Center - Stormwater LID Treatment Project 	Education and Improved Ecosystem	• Develop methods of adapting to Climate Change and other vulnerabilities to the region's water resources. • Create and Preserve natural ecosystems and protect endangered flora and fauna through Land Stewardship and Conservation Easement programs. • Develop and Improve methods of water reuse within a community. • Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater.	The Los Padres Center Project represents a Low Impact Development (LID) implementation project at a scale and under ownership where research, education, and water resources management can take place concurrently within a self-contained ecosystem. While not a large project, the Los Padres Center Project does offer opportunities for land use agencies to see and understand the elements of LID The area of land that will be benefitting from Stormwater LID Treatments belongs to the National Guard and are leased by the California Conservation Corps (CCC). The CCC - Los Padres Center is a residential center where approximately 80 corpsmember reside. Participants are 18-25 years old and sign up for 1 year to work on conservation projects that teach them skills and earn educational scholarships to help them be employable when they leave the CCC. The Center is located next to Chorro Creek and Poison Ivy Creek. By implementing this project the corpsmembers will not only benefit by learning LID techniques, and the importance of water quality and water conservation but will also benefit by having a more livable area at the center that will thoroughly engage them in land stewardship that they will take with them when they move on. Chorro Creek and listed endangered species such as, steelhead and California red-legged frogs will benefit by a reduction in peak run-off that degrades water quality and quantity by creating detention basins keeping the water on the land longer before slowly discharging in Chorro Creek. Morro Bay National Estuary Program brings together citizens, local governments, non-profits, agencies and landowners to protect and restore Morro Bay. This project is a collaboration with the CCC and the National Guard to implement a demonstration project that will target action items outlined in their Comprehensive Conservation Management Plan that provides guidance on recovery actions that will result in restoring and protecting the Bay by improving water quality, enhancing steelhead habitat, conserving water and providing natural environments for citizens to enjoy. The CCC Stormwater LID Treatment project is an ambitious demonstration project which will focus on eliminating flooding at CCC Buildings while also increasing groundwater infiltration and habitat restoration by installing site specific topographical earthwork features. The project estimates that on-site earthwork and plumbing can mitigate over one million gallons of water on the project site while attenuating adjacent Chorro Creek storm surges through seven acres of habitat restoration. By widespread land cover and shade tree installation at 43% of the project site, groundwater recharge areas will be increased. Reducing energy costs and local water supply reserves, including recycled onsite water (greywater, rainwater, mechanical), will be utilized for irrigation and indoor non-potable water uses such as toilet flushing. Two constructed wetlands will contribute to the largest reduction in the large storm event runoff, while greatly improving stormwater quality and potential for recreational activities such as birding and onsite watershed education. Over 9280 native and food bearing plants will be planted to cool buildings and reduce energy use while greatly improving the aesthetic and educational environment for the resident CCC corps members and nearby San Luis Obispo residents. Seven "living areas" will be installed through placement of plantings and earthworks to reduce off-site travel of CCC Corps members and increasing onsite recreational and learning opportunities. This project aims to be a learning laboratory for the corps members and future watershed crews. The corps members will be active and included on the CCC Native Greenhouse onsite; installation of the earthworks: inclusion in the construction of infiltration basins and bioswales by directed CCC corps members; take a part in planting and maintenance of plants; and assist in plumbing irrigation of specific plants through recycled onsite waters (i.e., grey water and captured stormwater).

Project Title	Type	Project Elements	Technical and Strategic Summary
Oceano Drainage Improvement Project - Hwy 1 & 13th Street 	Drainage Project with Groundwater Recharge	• Attenuate storm flows and improve stormwater quality by increasing on-site retention and detention controls. • Seek outside funding for water and flood control projects in low income areas. • Provide public education in the value of habitat restoration and protection of water quality and quantity in natural streams and groundwater.	The Project includes construction of approximately 1,500 feet of storm drain pipe, to convey drainage from the intersection of Highway 1 and 13th Street, and an outfall pond (sedimentation basin). The basin will collect storm flows and allow debris and sediments to settle out prior to discharge through the existing 36-inch culvert or a new box culvert located in the Arroyo Grande Creek levee. The project is located at the low point of an approximately 40.5 acre drainage shed area. The existing system is undersized for small storm events and as a result floods the Hwy 1 and 13th Street intersection and adjacent properties. The project will reduce the frequency of drainage issues at Hwy 1 and 13th Street by constructing drainage facilities that collect and convey flows to the Arroyo Grande Creek channel. The project will also lessen flows to the Meadow Creek Lagoon area, thereby_ helping to mitigate the existing drainage issues for downstream residences, businesses and the South County Sanitation District facilities. The project will reduce maintenance and storm related management of the surrounding area. It will improve access and circulation on Hwy 1 and adjacent roadways as well as increasing the efficiency of road operations and improve emergency response times for the surrounding area.
Lopez Water Treatment Plant Membrane Rack Addition 	Water Treatment Plant Expansion	• Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Develop new groundwater management projects to improve the quality and quantity of groundwater in accordance with a regional stakeholder-based groundwater basin plan.	Five communities receive treated water from the Lopez WTP and are entitled to varying quantities of treated water. The percentage that each community is entitled to, and therefore, the degree of benefit is as follows: Arroyo Grande - 50%, Oceano - 7%, Grover Beach - 18%, Pismo Beach - 20%, and CSA 12 (Avila Beach) - 5%. The Lopez WTP is a membrane filtration plant designed to treat surface water from Lopez Lake, a dam built in 1969 along the Arroyo Grande watershed. The Lopez Water Treatment Plant (WTP) Membrane Rack Addition Project involves the installation of additional membrane filter modules in the existing five membrane filtration racks and the construction of a new sixth membrane filtration rack. Addition of the membrane filtration modules and the membrane filtration rack will increase the WTP's filtration capacity enabling it to distribute more water to Zone 3 Agencies (five communities) and to provide greater reliability. The current membrane filtration capacity of the Lopez WTP is not sufficient to provide Zone 3 communities with their peak demands with available surface water. Because of this capacity limitation, these agencies pump groundwater, even when they have excess surface water entitlements and allocations available to them. Groundwater demands increase risk of saltwater intrusion and decrease availability of groundwater. Groundwater quality is also not as good as treated Lopez water. This project would enable the Lopez WTP to provide enough treated water to meet peak demands, thus, reducing groundwater pumping and improving water quality. The existing five membrane filter racks at the Lopez WTP require frequent and routine cleaning and maintenance, requiring certain racks to go 'off-line' for cleaning. Some cleaning requires two racks to be 'off- line' at the same time. During these types of cleaning and maintenance procedures, the Lopez WTP cannot produce peak contractual water allocation demands. The addition of membrane filter modules to the existing rack and an additional membrane filtration rack would allow cleaning and maintenance to occur while producing peak contractual water allocation demands.

Project Title	Type	Project Elements	Technical and Strategic Summary
Recycle Water Distribution System Expansion 	Recyled Water System Expansion	• Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Develop new groundwater management projects to improve the quality and quantity of groundwater in accordance with a regional stakeholder-based groundwater basin plan.	The project proposes to extend the City's recycled water distribution system from the existing 14-inch ductile iron recycled water main on Madonna Road with approximately 2,000 feet of new six-inch recycled water main to serve CL Smith Elementary School. Recycled water mains would be installed along Oceannaire Drive, Lakeview Drive, and Balboa Street, to CL Smith Elementary school located at 1375 Balboa Street. A new water service and water meter would be installed to serve the School's landscape. Minor modifications would be made to the School's irrigation system consistent with Title 22 requirements for signage and tagging of irrigation equipment. CL Smith Elementary School will be served recycled water from the existing 600,000 gallon recycled water storage tank and pump station at the City's Water Reclamation Facility. The San Luis Coastal Unified School District's Grounds Maintenance personnel are trained in the use of recycled water as Laguna Middle School is currently served recycled water by the City. The City has been delivering recycled water for landscape irrigation purposes since 2006 when improvements at the City's Water Reclamation Facility were completed as well as the first eight miles of pipeline for the recycled water distribution system. Annual deliveries have increased from 77.17 acre feet in 2007 to over 170 acre feet in 2013 at parks, the middle school, golf course, sports fields, and other sites. The City's goal is to deliver 1,000 acre feet per year of recycled water through retrofitting existing irrigation systems and connections to serve new development in the City. Demand to provide recycled water for landscape irrigation exists proximate to the City's existing recycled water distribution system; however, extensions of the distribution system are needed to connect future customers. CL Smith Elementary School was identified as a priority connection as it is located proximate to an existing backbone recycled water main.
Pismo Beach Recycled Water Project 	Recycled Water System Expansion	• Develop new treatment and conveyance facilities to increase and protect the availability of existing water supplies. • Develop and Improve methods of water reuse within a community •Develop and improve water and wastewater treatment facilities to reduce point source discharges of contaminants to natural streams •Seek outside funding for water and flood control projects in low income areas.	The project includes the design and construction of a recycled water treatment and distribution system for the City of Pismo Beach. The project would make recycled water available for the City, its customers, and potentially others in the South County Subregion if excess recycled water is available. The project includes upgrades to the existing wastewater treatment facility and construct of a recycled water distribution system to deliver water to landscape irrigation customers. The first phase of the distribution system would include providing recycled water to Caltrans for irrigation along US 101. The City is partnering with adjacent agencies so that in the future a regional recycled water treatment program could be developed in conjunction with the SSLOCSD to make additional recycled water available for the South County Sub-Region. Possible future uses for recycled water include: groundwater recharge; agriculture irrigation; seawater intrusion barrier; stream flow augmentation; etc. The Project addresses the need for increased supply reliability and drought preparedness by: 1) bringing a new water supply for beneficial use online, 2) improving operational flexibility and reliability of existing supplies, 3) creating a potential source of supply for groundwater storage projects, 4) maintaining and improving water quality of the groundwater basin through demand offset, 5) providing a potential supply source for augmenting stream flows, 6) improving water-related needs of a DAC, 7) implementing public education and outreach, and 8) preventing water supply and conservation projects from detrimentally impacting the water quality in the basin.

STRATEGIC CONSIDERATIONS

The first step in the project review process places each project into an Objectives filter where a scoring system is applied to determine where a project succeeds in satisfying the IRWM Plans Goals and Objectives.[5] The scoring system used is as follows:

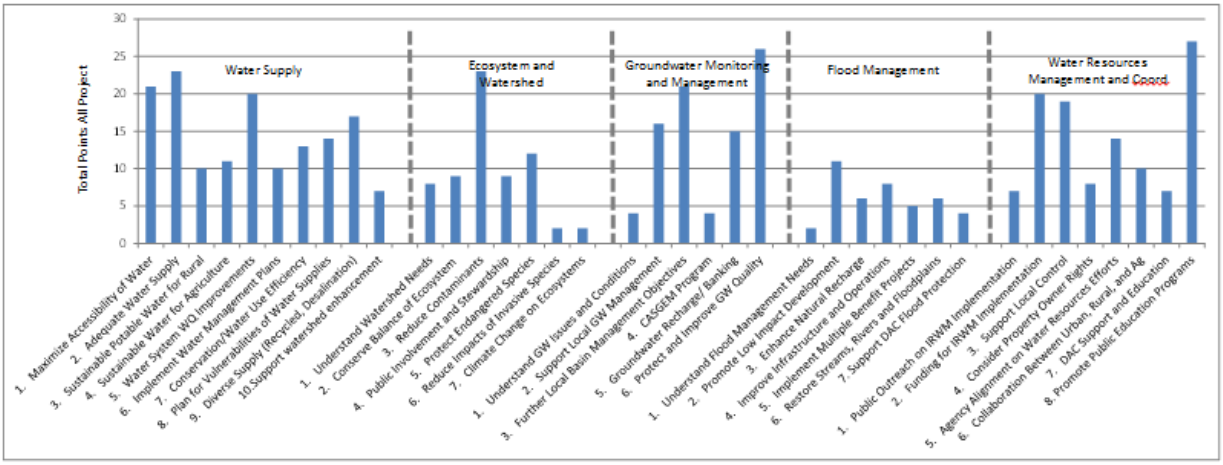
Score

1 – Project partially satisfies the Objective's intent but is not focused on achieving the Objectives intended outcome.

2 – Project is not directly aimed to satisfy the Objective's intended outcome, but Objective benefits can be measured, either qualitatively or quantitatively as part of implementation.

3 – Project is directly aimed to meet the Objective's intended outcome and includes a monitoring program for qualitative or quantitative measurement the Objectives physical benefits.

The figure below illustrates how the collective Project Short List's Project Elements meet IRWM Plan Objectives. To some extent, this chosen suite of IRWM Projects addresses all IRWM Plan objectives. The information gathered from this exercise is further used in associating the Project Elements (i.e., derived from WMS and RMS), as described in the individual in the Project Elements section in the PWP. From the figure, the Water Supply Goal shows to have the highest number of project benefits, and the Flood Management Goal the lowest number of benefits. Overall, the level of uniformity provides a high level of confidence in meeting each of the IRWM Plan's Objectives.



[5]All information contained within the PWP is derived from the Long Form and Objectives Worksheet; however, in cases where a difference is noted, the PWP takes precedence over both documents.