



Section J. Plan Performance and Monitoring

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Preface

This section has been written to fully address the state guidelines for substantive plan performance monitoring without constraining the content by budget and resource concerns. The expectation is that the actual implementation of this section requires a level of effort that is commensurate with available funding and resources in any given year. The goal is to continuously improve the monitoring effort over time, working with the RWMG, and outside funding sources, in deciding on what monitoring elements are sustainable and beneficial. Funding and resources for Plan implementation will be evaluated regularly and described in the Plan Performance Reporting Plan described herein.

Funding of the full monitoring program is anticipated to occur incrementally over the 20-year planning period as the IRWM Plan implementation moves forward in time with implementation of projects and programs. This means that the full monitoring effort described herein is not currently in place. The District and RWMG plan to work together towards each year in making sure sufficient resources are budgeted for this important effort.

Section J. Plan Performance and Monitoring

J.1 INTRODUCTION

This Section defines the Plan Performance and Monitoring Strategy. The IRWM Plan legislation and DWR standards require that IRWM Plans include performance measures and a monitoring program to document progress towards meeting IRWM Plan Objectives, and a methodology that the Regional Water Management Group (RWMG) will use to oversee and evaluate implementation of projects. The purpose of the Plan Performance and Monitoring strategy is to document how the IRWM Plan Objectives are to be measured and how the projects will be overseen and evaluated in order to ensure the anticipated IRWM Plan objectives are being met. This section also describes the method to report the San Luis Obispo County Region's progress in meeting the objectives and implementing projects.

Performance in meeting IRWM Plan Objectives is tracked at two levels. First, at the IRWM Program-level, performance measures and monitoring methods are developed and used to evaluate the overall progress in meeting each objective. Second, at the IRWM Project-level, each project that is submitted for inclusion in the IRWM Plan is evaluated to see which objectives it will address (see **Section G – Project Solicitation, Selection and Prioritization** and **Section H – Project Integration and Alternatives**). The project sponsor or sponsoring group will provide information on project progress to the District and once complete, verify that the project meets the identified objectives. The results of the performance and monitoring effort at the two levels will be used by the District, referred to as lead agency to measure and track success, prepare regular progress reports to the RWMG, and present IRWM Plan results to public and stakeholders to maintain and gain further support for the IRWM Plan. These processes are described in more detail below.

The Lead Agency is responsible for:

- IRWM Plan implementation, evaluation, and monitoring the overall performance in meeting the Goals and Objectives
- Reaching out to local stakeholders of each Sub-Region and update the Sub-Region Priorities
- Annually evaluating the performance for implementing projects that contribute to meeting the overall Goals and Objectives
- Tracking all project sponsors, including aggregating reports of specific projects performance, and monitoring

- Budgeting resources to ensure the monitoring efforts are affordable given the limited resources of the project sponsors and lead agency

The annual review by the RWMG is part of the adaptive management strategy that will help guide changes to the IRWM Plan in the future. It will be used to facilitate discussion of “lessons learned” from project-specific monitoring efforts.

J.2 IRWM PROGRAM LEVEL PERFORMANCE MEASURES AND MONITORING

METHODS

The IRWM Plan Objectives were established by the RWMG (**Section E – Goals and Objectives**). The RWMG broadly defines the objectives so that they are easy to communicate and achieve stakeholder consensus. **Section E – Goals and Objectives (Tables E-6 to E-10)** provides a qualitative and/or quantitative performance measure to assess each of the IRWM Plan Objectives. For the purposes of this section, the measures have been combined in one column in the tables below. The monitoring methodology for each objective has been added. Monitoring the objectives will inform the RWMG as to how the needs of the Region are being met and what projects or programs should be supported to address deficiencies.

J.2.1 Expected Level of Effort

The volume of information from each performance measurement is expected to vary significantly based on the nature of the metric. The District’s efforts in periodically “checking-in” with specific monitoring agencies, stakeholders, and project sponsors and coordinating the expectations in the frequency, format, and interpretation can be considerable. The District will plan to develop and provide a comprehensive database design to capture and report qualitative and quantitative data. This effort is expected to be challenging both in terms of technology, staff training, and long-term funding. With an approximate 5-year monitoring period, maintenance to keep the database current, coordination in keeping the participants engaged and cooperative, and actions in maintaining vigilance over the quality of the data is considered to be a daily task undertaken by the District with a level of effort requiring at least one half of a full-time equivalent Grade 4 or higher Engineering Technician or Associate Civil Engineer.

The District’s level of effort in the 5-year evaluation period of the monitoring data is also dependent on the level of interpretation made by the monitoring agencies. In cases where the District cannot make a determination or accurate assessment of the data, the monitoring agency, or a consultant, may be asked to assist in this effort. Costs may be allocated amongst benefiting parties depending on the nature of the data. If financial resources are not available, a qualitative discussion of the data is optional.

Table J-1. Water Supply Goal

OBJECTIVES	PERFORMANCE MEASURES	MONITORING METHODS
<p>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.</p>	<p>Increasing amounts of total available surface water supply stored for subsequent years or provided to customers as an offset to groundwater pumping, creating in-lieu recharge.</p>	<p>The District collects water use and availability information on an annual basis from all water purveyors (see Section K – Data Management). Agricultural and rural water demand will be updated every 5 years as a part of the IRWM Plan’s 5-year update cycle. The water use information can be compared to water availability information to track how much water was available but not put to use or otherwise stored in each 5-year period.</p>
<p>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.</p>	<p>Decreasing number of communities with deficiencies.</p>	<p>The County collects system deficiency information biennially for its Resource Management System (see Section N – Relation to Local Water and Land Use Planning). The number of communities with deficiencies will be tracked via this program in order to support appropriate corrective projects.</p>
<p>3. Support sustainable potable water supply programs for rural residents.</p>	<p>Decreasing number of comments or complaints from the rural community regarding loss, or potential loss, of quality or quantity of their water supplies.</p>	<p>The District will coordinate with other County departments to maintain documentation of identified issues, including dry wells, to support appropriate responses.</p>
<p>4. Support sustainable water quality and supply programs for agriculture.</p>	<p>Decreasing number of comments or complaints from the agricultural community regarding loss, or potential loss, of quality or quantity of their water supplies.</p>	<p>The District will coordinate with other County departments to maintain documentation of identified issues, including dry wells, to support appropriate responses.</p>
<p>5. Support projects aimed to improve existing public water systems to meet state or federal drinking water quality standards.</p>	<p>Decreasing number of community water systems that do not currently meet state or federal drinking water quality standards.</p>	<p>The District will coordinate with the Public Health Agency and state agencies to maintain documentation of systems that do not currently meet state or federal drinking water quality standards so that the RWGM will know which communities need support .</p>

Table J-1. Water Supply Goal, Continued

OBJECTIVES	PERFORMANCE MEASURES	MONITORING METHODS
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.	Number of communities without water management plans.	The District will inventory the number of communities without water management plans as a part of the IRWM Plan's 5-year update cycle.
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.	Increasing number of acre-feet per year of urban, agriculture, and rural water saved through formal water use efficiency projects and programs.	The District collects water use and availability information on an annual basis from all water purveyors (see Data Management Section). Agricultural and rural water demand will be updated every 5 years as a part of the IRWM Plan's 5 year update cycle. Every 5 years, the extent to which all water use sectors have developed and implemented conservation programs, will be assessed.
8. Plan for potential regional impacts of greenhouse gas emissions, climate change, and droughts on water quantity and quality.	Existence of County-wide planning studies that identify greenhouse gas emission sources, regional vulnerabilities, and forecast the needed changes in water supplies and water supply infrastructure as a result of climate change.	The District will inventory climate change planning efforts as a part of the IRWM Plan's 5-year update cycle.
9. Diversify water supply sources, including the use of recycled and desalinized water.	Decreasing number of communities without a secondary water supply source.	The District will inventory the number of communities without a secondary water supply as a part of the IRWM Plan's 5-year update cycle.
10. Support watershed enhancement projects and programs to increase available water supplies to the Region.	Decreasing number of comments or complaints from the agricultural community regarding loss, or potential loss, of quality or quantity of their water supplies.	The County collects groundwater supply deficiency information biennially for its Resource Management System (see Section N – Relation to Local Water and Land Use Planning). The number of basins with deficiencies will be tracked via this program in order to support appropriate corrective watershed projects.

Table J-2. Ecosystem and Watershed (Ecosystem) Goal

OBJECTIVES	PERFORMANCE MEASURES	MONITORING METHODS
1. Develop watershed plans or other methods to determine the existing conditions and critical issues of each watershed or water planning area.	Decreasing number of watersheds without plans or similar methods developed to understand the needs in watershed or water planning area.	The District will inventory the number of watersheds without plans or similar methods developed to understand the needs in watershed or water planning area as a part of the IRWM Plan's 5-year update cycle.
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.	Increasing number of acres preserved for ecosystem restoration and/or preservation. Increasing number of acres of healthy or improved natural recharge areas associated with riparian corridors.	The District will coordinate with local agencies such as the County Planning Department, Land Conservancy, and Resource Conservation districts to track preservation acreage and mitigation activities that improve recharge areas along riparian corridors.
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 total maximum daily load (TMDL) values.	Increasing number of programs with the intent to protect surface water and groundwater recharge areas and improve surface water and/or groundwater quality. Increasing number of creeks that have a water quality measuring program in place.	The District will coordinate with local agencies such as the Planning Department, Land Conservancy, and Resource Conservation districts to track mitigation activities that improve recharge areas along riparian corridors. The District will inventory the number of creeks that have a water quality measuring program in place as a part of the IRWM Plan's 5-year update cycle.
4. Develop public involvement and stewardship programs for public lands and ecosystems.	Increasing public involvement and stewardship programs that cover all public lands and ecosystems.	The District will inventory the extent to which public involvement and stewardship programs cover all public lands and ecosystems as a part of the IRWM Plan's 5-year update cycle.

Table J-2. Ecosystem and Watershed (Ecosystem) Goal, Continued

OBJECTIVES	PERFORMANCE MEASURES	MONITORING METHODS
5. Protect and recover threatened, endangered and sensitive species through habitat restoration, stream flow management, and fish passage restoration.	Increasing number of management programs and projects with the primary benefit to improve threatened, endangered, and sensitive species corridors.	The District will coordinate with local agencies such as the County Planning Department, Land Conservancy, and Resource Conservation districts to track miles of additional stream or land opened to species habitat or migration; miles of additional stream or watershed corridor restored and the decrease in threatened, endangered, and/or sensitive species populations.
6. Reduce impacts of invasive species by removal and/or other management/control methods to promote healthy ecosystems.	Increasing number of studies and management and/or prevention programs and projects established to reduce invasive species or re-establish native species populations. Decreasing number of invasive species problems.	The District will coordinate with local agencies such as the County Agricultural Commissioner's Office and Resource Conservation districts to track the number of studies and management and/or prevention programs and projects established to reduce invasive species or re-establish native species populations and the number of invasive species problems.
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.	Existence of monitoring and research programs that identify the long-term effects of climate change and greenhouse gas emissions on the Region's watersheds and ecosystems.	The District will inventory climate change monitoring efforts and the extent to which the long-term effects are understood for the Region as a part of the IRWM Plan's 5-year update cycle.

Table J-3. Groundwater Monitoring and Management (Groundwater) Goal

OBJECTIVES	PERFORMANCE MEASURES	MONITORING METHODS
<p>1. Develop groundwater management plans, including salt and nutrient management plans, or other methods to help understand groundwater issues and conditions.</p>	<p>Increasing percentage of the Region’s groundwater basins that have adopted Groundwater Management Plans and governance structures (only in basins where required).</p>	<p>The District will inventory the number of groundwater basins that have adopted Groundwater Management Plans and governance structures as a part of the IRWM Plan’s 5-year update cycle.</p>
<p>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.</p>	<p>Increasing percentage of the Region’s groundwater basins that have groundwater management structures for the purpose of implementing plans, programs, and projects.</p>	<p>The District will inventory the number of groundwater basins that have groundwater management structures for the purpose of implementing plans, programs, and projects as a part of the IRWM Plan’s 5-year update cycle.</p>
<p>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.</p>	<p>Increasing number of projects consistent with adopted Groundwater Management Plan Basin Management Objectives (BMOs) for the improvement of the health of a groundwater basin.</p>	<p>The District will track the number of projects and programs implemented consistent with adopted Groundwater Management Plan BMOs.</p>
<p>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.</p>	<p>Increasing number of basins meeting CASGEM standards.</p>	<p>The District will inventory the number of basins meeting CASGEM standards as a part of the IRWM Plan’s 5-year update cycle.</p>

Table J-3. Groundwater Monitoring and Management (Groundwater) Goal, Continued

OBJECTIVES	PERFORMANCE MEASURES	MONITORING METHODS
<p>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.</p>	<p>Increasing percentage of acreage or groundwater basins within the Region that have been studied or looked at for viability of groundwater banking.</p> <p>Increasing number of groundwater banking projects implemented where technically feasible and cost-effective.</p>	<p>The District will inventory the number of basins that have been evaluated for banking feasibility as a part of the IRWM Plan's 5-year update cycle.</p> <p>The District will inventory the number of basins that have implemented banking projects where technically feasible and cost-effective as a part of the IRWM Plan's 5-year update cycle.</p>
<p>6. Protect and improve groundwater quality from point and non-point source pollution, including geothermal contamination and seawater intrusion.</p>	<p>Increasing number of projects/programs implemented for the improvement and protection of groundwater basin water quality.</p>	<p>The District will track the projects/programs implemented for the improvement and protection of groundwater basin water quality.</p>

Table J-4. Flood Management Goal

OBJECTIVES	PERFORMANCE MEASURES	MONITORING METHODS
1. Understand flood management needs per watershed or water planning area.	Decreasing number of watersheds without plans regarding flood management needs.	The District will inventory the number of watersheds without plans regarding flood management needs as a part of the IRWM Plan's 5-year update cycle.
2. Promote the implementation of Low Impact Development projects and practices to reduce storm runoff to protect infrastructure and property from flood damage.	Increasing number of development projects where specific development conditions have been applied for the incorporation of storm water runoff reduction elements.	The District will coordinate with local agencies such as the County Planning Department, individual communities, Resource Conservation districts and the resource agencies to track the number of development projects where specific development conditions have been applied for the incorporation of storm water runoff reduction elements.
3. Integrate storm water controls, drainage and flood control structures into development projects and/or floodplain restoration to enhance natural groundwater recharge.	Increasing number of projects where specific development conditions apply directly to actions benefitting groundwater recharge.	The District will coordinate with local agencies such as the County Planning Department, individual communities, Resource Conservation districts and the resource agencies to track the number of development projects where specific development conditions have been applied for the purpose of 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.	Increasing number of improvements to flood control infrastructure and operations and flood management strategies for the purposes of reducing frequency of downstream flooding, improving water quality, and reducing upstream erosion and downstream sediment accumulation in watersheds where those issues are identified.	The District will coordinate with local agencies such as the County Planning Department, individual communities, Resource Conservation districts and the resource agencies to track the number of applicable flood management improvements.

Table J-4. Flood Management Goal, Continued

OBJECTIVES	PERFORMANCE MEASURES	MONITORING METHODS
5. Develop and implement flood management and water storage projects that provide multiple benefits such as public safety, water supply, habitat protection, recreation, agriculture, and economic development.	Increasing number of flood management projects where multiple human and habitat-related benefits can be described.	The District will coordinate with local agencies such as the County Planning Department, individual communities, Resource Conservation districts and the resource agencies to track the number of flood management projects that address both human and habitat needs.
6. Develop and implement flood control projects that ensure health and safety and simultaneously protect, restore, and enhance the functions of rivers, creeks, streams, and their floodplains.	Increasing number of miles of waterways where deliberate measures have taken place to improve riparian floodplains. Increasing number of acres of floodplain acquired.	The District will coordinate with local agencies such as the County Planning Department, individual communities, Resource Conservation districts and the resource agencies to track the applicable floodplain projects in terms of waterway mileage and acres of floodplain.
7. Support the adequate protection of disadvantaged communities from flooding without unfairly burdening communities, neighborhoods, or individuals.	Demonstrated efforts to work with flood agencies to bring the flood management needs of DACs to the forefront for consideration of flood management actions.	The District will coordinate with local agencies such as the County Planning Department, individual communities, Resource Conservation districts and the resource agencies to track the number of flood management efforts for DACs.

Table J-5. Water Management and Communications (Water Management) Goal

OBJECTIVES	PERFORMANCE MEASURES	MONITORING METHODS
1. Provide consistent, consolidated and informative public outreach on the coordination of IRWM implementation projects and water resources programs.	Implementation of the reporting plan contained within the IRWM Plan.	The District will track whether the reporting plan is followed.
2. Seek funding for IRWM implementation without unfairly burdening communities, neighborhoods or individuals.	Continuous effort to pursue grants and loans without unfairly burdening communities, neighborhoods or individuals.	The District will track efforts to pursue grants and loans for IRWM implementation.
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 cities, community services districts and other water purveyors when possible.	<p>Development of a communication network for the purpose of reaching out in the most cost effective and timely manner.</p> <p>Total number of communication events making use of documented structured network and the estimated total number of people informed.</p>	The District will coordinate with other local entities to track the occurrence of water management efforts in the Region that are supportive of local control and involve coordination amongst multiple entities, and collect information on the number of people informed and by what method.
4. Consider property owner rights, existing water supplies and cultural values in the planning and implementation of IRWM projects and programs.	Demonstrated efforts to work with planning and water agencies to protect existing water rights and private lands of those possible affected by their actions.	The District will track when property owner rights and cultural values are addressed during IRWM efforts in the Region and by what method.
5. Support efforts by the state, local agencies, water purveyors, and local groundwater governance bodies to align efforts to protect and manage water resources.	Demonstrated water resource management and protection efforts that integrate the state's, local governments', and water purveyors' policies.	The District will coordinate with local entities to track water resource management and protection efforts that integrate the state's, local governments', and water purveyors' policies.

Table J-5. Water Management and Communications (Water Management) Goal, Continued

OBJECTIVES	PERFORMANCE MEASURES	MONITORING METHODS
6. Seek opportunities for water management collaboration between urban, rural, and agricultural interests.	<p>Demonstrated efforts to work with urban, rural and agricultural interest groups to bring them together on water issues.</p> <p>Number of meetings convened specifically to resolve issues and conflicts regarding urban, rural and agricultural differences in water supply.</p>	The District will coordinate with other local entities to track efforts in the Region to resolve issues and conflicts regarding urban, rural, and agricultural differences in water supply, and collect information on the number of meetings.
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.	<p>Demonstrated efforts to reach out to DACs and provide assistance and services through local- and state-funded programs for purposes of improving their water resource management projects.</p> <p>Number of grant/loan applications submitted and projects constructed as a result of this effort.</p>	The District will coordinate with other local entities to track efforts in the Region to support water resource management efforts for DACs, and collect information on the number of grant applications and projects constructed.
8. Promote public education programs for groundwater management, watershed protection, conservation, flood management, and water quality.	Existence of public education programs for groundwater management, watershed protection, conservation, flood management, and water quality and efforts to promote them.	The District will coordinate with other local entities to track the existence of public education programs in the Region for groundwater management, watershed protection, conservation, flood management, and water quality and efforts to promote them.

J.3 PROJECT-LEVEL PERFORMANCE AND MONITORING PLAN

The projects included and/or implemented through the IRWM Plan contribute to meeting the overall Regional IRWM Plan's Goals and Objectives. The scope of projects and programs included in the IRWM Plan are evaluated to determine which Plan Objectives will be addressed by implementation of the project or program (see **Section G – Project Solicitation, Selection and Prioritization** and **Section H – Project Integration and Alternatives**). As a part of the IRWM Plan's 5-year update schedule, or when the project list is updated, project proponents/sponsors will provide an updated form to reflect progress and any change in scope in order to re-evaluate the objectives met by the project or program.

Further, each of the projects' sponsors will develop detailed Project Performance and Monitoring plans if IRWM grant funds are received. Information generated from each of the Project Performance and Monitoring plans will be collected by the District for updating the IRWM Plan or the project list on a time schedule as outlined in the grant agreement. The projects and their physical benefits are to be developed during the planning and grant writing phase and are intended to set the stage for tracking a project's contribution to meeting the IRWM Plan Objectives. The performance measures and metrics provide a basis for further developing a detailed project performance database which will identify:

- Project goals
- Desired outcomes
- Output indicators – measures to effectively track output
- Outcome indicators – measures to evaluate change that is a direct result of the work
- Measurement tools and methods
- Measurable targets that are feasible to meet during the life of the proposal
- Monitoring measurements and interpretation of change in output indicators over time

Output indicators measure on-the-ground implementation of management actions, such as acres of habitat restored, miles of levees strengthened, etc. Output indicators also describe the level of activity that will be provided over a period of time, including a description of the characteristics (e.g., timeliness) established as standards for the activity. Outputs refer to the internal activities of a program – the products and services delivered.

The outcome measures should be tied to the goals and objectives of the program. These could also be specific numerical targets. These usually compare systems with and without (baseline) project conditions for large systems variables. The relationship of the projects' monitoring to

existing or proposed regional¹ programs and the ability to integrate monitoring efforts should also be evaluated.

Prior to a project's implementation, each project will provide an explanation of the following:

- Describe what is being monitored (e.g., water quality, water depth, flood frequency, and effects the project may have on habitat or particular species, before and after construction)
- Measures to remedy or react to problems encountered during monitoring
- Location and frequency of monitoring, also documenting any quality assurance projects plan (QAPP)
- Monitoring protocols/methodologies, including who will perform the monitoring
- Frequency of interpreting, reporting, and transmitting monitoring data for inclusion in overall IRWM Plan Performance and Monitoring

In addition, project sponsors will provide monitoring data to the state of California, in forms and formats needed to be included in the state's databases, where this is a condition of any grant funding. The RWMG members are already participating in a number of regional monitoring efforts. One of the potential projects is to develop further regional monitoring for purposes of ensuring and demonstrating compliance with the TMDL requirements. Project sponsors will ensure the monitoring schedule is maintained and that adequate resources (funding) are available in maintenance and operations budgets in order to maintain monitoring of the project throughout the scheduled monitoring timeframe.

J.4 EVALUATING AND REPORTING PLAN PERFORMANCE AND MONITORING RESULTS

As custodian (or lead agency) of the IRWM Plan, the District (staff) has the responsibility of working with the RWMG, local and Sub-Region stakeholders, and the monitoring agencies, and tracking each of the performance measures in the form of their respective metrics. **Section K – Data Management** includes the description of the numerical data being collected throughout the IRWM region to improve the understanding of listed Regional Interest Classifications (see Table K-1). A different type of data collection effort takes place for measurement of the IRWM Plan's performance.

Performance of the IRWM Plan is tied directly to implementation of the projects and programs identified as being the highest ranking in terms of meeting the stated Goals and Objectives. To accomplish the assembling of data and making the correlation of benefit to the IRWM program,

¹ The term "regional" used in this context refers to monitoring and reporting programs taking place over multiple watersheds, or across defined planning areas.

a separate data collection program is required with a different set of database requirements and District, RWMG and stakeholder involvement in the data collection and reporting process. In the process of meeting with and capturing the Plan’s performance, local Sub-Region Priorities identified in **Section E – IRWM Goals and Objectives** will be evaluated, and, if necessary, updated to reflect current-day priorities. The means of monitoring, evaluating and reporting IRWM Plan performance at the Programmatic- and Project-level on a 5-year cycle is described below.

J.4.1 Programmatic-Level Monitoring and Reporting

The information collected in accordance with the monitoring strategies for each objective will be evaluated to determine whether there is progress in meeting the stated objectives. A color coding system will be applied to the “Performance Measures” column of **Table J-1 to Table J-5**, relabeled as “Performance Category”:

- **Color 1:** Objective has been met (e.g., if the metric is simply “does it exist?” and it does, this monitoring element is satisfied and no longer requires additional monitoring)
- **Color 2:** Objective is being met (e.g., if projects have been implemented and are resulting in measurable increases or decreases in accordance with the stated metric and objective, monitoring and reporting is successful, and continues until the objective has been met (see Color 1))
- **Color 3:** The Objective was not addressed in any way in the last 5 years (e.g., if projects are planned and included in the plan, but not implemented, the reporting should include what factors are preventing the implementation from occurring.)
- **Color 4:** The Objective has never been addressed in any way (e.g., if no projects or programs are included in the IRWM Plan to meet the Objective, the reporting should state a methodology to begin exploring possible solutions.)

The “Monitoring Method” column will be used to describe the things that happened to result in the chosen color and renamed as “Methods of Achieving Objective.” **Table J-6** provides an illustrative “fictitious” example showing this methodology for programmatic reporting. The use of Sub-Region reporting is used when appropriate. One objective may result in three colors, one for each Sub-Region. Sub-Region Objectives (see Table E-11) are used to describe the local objective and provide context to the methods being used (e.g., North County methods focus on groundwater benefits and increased use of supplemental water supplies) to achieve the overarching IRWM Plan Objectives.

Table J-6. Example of Programmatic Monitoring and Reporting Table

OBJECTIVES	PERFORMANCE CATEGORY	METHOD(S) OF ACHIEVING OBJECTIVE
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.	North Coast	North Coast Sub-Region has increased both recycled water and desalinated water supplies through system upgrades and imports.
	North County	North County Sub-Region is maximizing the Nacimiento Pipeline by operating a new surface water treatment plant to meet urban demands, and providing additional surface water to agriculture offsetting groundwater use.
	South County	South County Sub-Region constructed a recycled water treatment plant to reduce salinity and nitrates in the groundwater.
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.	North County	5 of the 5 identified water systems throughout the IRWM Region with water supply deficiencies affecting peak demand and annual average demand deliveries have been corrected through local and state grant funded projects and programs.
3. Support sustainable potable water supply programs for rural residents.	North County	No projects are taking place to directly benefit the objective. Agricultural Education programs can be expanded to include rural residents to improve quantity and quality of groundwater.
4. Support sustainable water quantity and supply programs for agriculture.	North Coast	North County Sub-Region is seeing groundwater elevations rising in the most severely impacted areas through water use efficiency and increased use of surface water through improved conveyance programs.
5. Support projects aimed to improve existing public water systems to meet state and federal drinking water quality standards.	North County	10 of the identified water systems with water quality deficiencies have not been addressed in the last 5 years. Project sponsors are being solicited for projects to include in the next state grant cycle.

J.4.2 Project-Level Monitoring and Reporting

J.4.2.1 IRWM Past, Present, and Future Projects

By receiving Proposition 50 and Proposition 84 Implementation Grants between 2008 and 2012, the San Luis Obispo project sponsors and the RWMG have a responsibility to monitor project-specific performance and measurable physical benefits, if available; otherwise, qualitative benefits require detailed descriptions. Projects from the 2007 IRWM Plan and the 2014 IRWM Plan Update are provided below with a brief description of the current status and a summary statement with a brief description (if available) and the methodology of objective benefits. This list is also included in **Appendix G-1 – Project Selection Brochure**.

Table J-7. 2007 and 2014 IRWM Project List

Project Category and Title	2014 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	2014 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.
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	2014 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	2014 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

Table J-7. 2007 and 2014 IRWM Project List, Continued

Project Category and Title	2014 Project Status	Project Summary Statement
		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 2014 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 & 13 th Street	2014 IRWM Project	Construction of storm drain pipe, to convey drainage from the intersection of Highway 1 and 13 th 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.
Los Osos Water System Improvements	2014 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	Completed (2014)	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	Completed (2013/14)	The District, in collaboration with the Paso Robles Groundwater Basin Steering

Table J-7. 2007 and 2014 IRWM Project List, Continued

Project Category and Title	2014 Project Status	Project Summary Statement
Basin Model Update and Analysis of Potential Solutions		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	DESCRIPTION NOT AVAILABLE
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 Sunoff, 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	DESCRIPTION NOT AVAILABLE; considered a project/design application. Suggest holding for implementation project solicitation process.
WATER QUALITY PROTECTION AND IMPROVEMENT		
Atascadero Wastewater System Upgrade	Completed (YEAR)	Upgrades to 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

Table J-7. 2007 and 2014 IRWM Project List, Continued

Project Category and Title	2014 Project Status	Project Summary Statement
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 2014 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.
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

Table J-7. 2007 and 2014 IRWM Project List, Continued

Project Category and Title	2014 Project Status	Project Summary Statement
		(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	On-hold	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

Table J-7. 2007 and 2014 IRWM Project List, Continued

Project Category and Title	2014 Project Status	Project Summary Statement
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
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	DESCRIPTION NOT AVAILABLE; 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)	DESCRIPTION NOT AVAILABLE; 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	2014 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

Table J-7. 2007 and 2014 IRWM Project List, Continued

Project Category and Title	2014 Project Status	Project Summary Statement
		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	2014 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	2014 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.
Cambria Pump Station	Completed (2011) with Cambria Flood Control Project Listed Above	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	2014 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.

J.4.3 IRWM Future Project Monitoring

Foreseeable project-specific monitoring activities related to each of the selected IRWM projects include the following:

Table J-8. Future Project Monitoring List

Project Code	Project Title	Monitoring Activities
MLTP_ECO1	Livestock & Land Program	Detailed accounting of Participating Property Owners, the BMPs implemented, and, if sufficient density of combined properties (or larger ranch participation), an attempt at developing a baseline comparison of water quality in local streams over a 3-year period.
MLTP_WMT2	LID Pilot Program	Detailed accounting of Participating Property Owners, the BMPs implemented. Because of the small scale and low density of homes in a single watershed, a qualitative discussion of benefits is likely.
NCNT_ECO1	North County Fertilizer Regions_ Precision Agriculture	Detailed accounting of Participating Property Owners, the BMPs implemented, and, if sufficient density of combined properties (or larger farm participation), an attempt at developing a baseline comparison of water quality in local streams over a 3-year period.
NCNT_ECO2	Attiyeh Ranch Conservation Easement	Detailed accounting of activities taking place on the easement including the progress towards meeting public outreach and educational objectives.
NCNT_GWM1	Upper Salinas River Basin Water Conservation/Conjunctive Use Project	Detailed accounting of the amount of treated wastewater percolated into the underflow of the Salinas River, the weekly change in dedicated monitoring wells to measure groundwater elevations underlying the discharge basins and 9000 feet down gradient at the extraction well, and the amount of extracted water for potable uses.
NCNT_WMT1	Community Based Social Marketing	Detailed accounting of the specific measures taken to educate the larger public of the need for water conservation and management. A random public polling process before and after the 3-year effort will be conducted in the Paso Region.
NCNT_WMT2	Improving on Farm Water Management Through Demonstration, Research & Outreach of Precision Agricultural Best Management Practices	Detailed accounting of Participating Property Owners, the BMPs implemented, and, if sufficient density of combined properties (or larger farm participation), an attempt at developing a baseline comparison of water quality in local streams over a 3-year period.
NCNT_WSP1	City of Paso Robles Lake Nacimiento Water Treatment Plant Construction	Detailed accounting of the amount of surface water diverted and treated at the Nacimiento WTP over a 10-year period, along with 3 dedicated monitoring wells for purposes of evaluating the behavior of groundwater with documented reduction in groundwater pumping.
NCNT_WSP2	San Miguel Critical Water System Improvements	Detailed accounting of system performance, (i.e., tank levels, system pressures, number of shutdowns, and run times of generators).
NCST_GWM1	8th Street Upper Aquifer Well and Nitrate Removal Facility	Detailed accounting of the amount of groundwater treated from the shallow extraction well, and the change in groundwater levels over a 10-year period in the deeper aquifer as a result of reduced pumping.
NCST_FLD1	Los Padres CCC Center - Stormwater LID Treatment Project	Detailed accounting of inventory of BMPs implemented and qualitative description of public involvement and ecosystem benefits (e.g., introduction of new flora and fauna)
SCNT_FLD2	Oceano Drainage Improvement Project - Hwy 1 & 13th Street	Detailed accounting on the frequency of basin fill and drain cycles, changes in shallow groundwater elevations using a privately owned well near the project site, and flooding on Highway 1 over a 10-year period.
SCNT_WMT1	Lopez Water Treatment Plant Membrane Rack Addition	Detailed accounting of system performance, total annual increase in surface water volume provided to urban water districts, and regional changes in groundwater elevations over a 10-year period.
SCNT_WSP2	Recycle Water Distribution System Expansion	Detailed accounting of recycled water deliveries, showing increases over time, and changes in groundwater levels and quality underlying the City of San Luis Obispo.
SCNT_WSP3	Pismo Beach Recycled Water Project	Detailed accounting of recycled water deliveries, showing increases over time, and changes in groundwater levels and quality underlying the City of Pismo Beach.

J.4.4 Plan Performance Evaluation Report

The format of the 5-year report will closely follow the outline below:

- a) Current State of the IRWM Plan
- b) Summary of IRWM Planning Activities over the 5-Year Monitoring Period
- c) Updated Sections of the IRWM Plan, Identifying Those Requiring Agency Re-Adoption
- d) The Total Level of Effort and Costs to Conduct the Monitoring and Reporting
- e) Description of Changes in Governance Structure, RWMG Actions and Plan Amendments
- f) Plan Performance and Monitoring
 - i) Summary of Responsible Monitoring Agencies and Frequency of Reporting (Includes a table of agencies categorized by Monitoring Element and Performance Measurement)
 - ii) Summary Report on Performance Measurements (where data exists)
 - (1) Who provided what data
 - (2) Interpretation of data
 - (3) Meaning to the IRWM Plan's Performance
 - iii) Project-Specific Monitoring
 - (1) By Project Monitoring Results
 - (2) Comparison with Stated Project Benefits
- g) Lessons Learned and Improvements to Monitoring Plan
- h) Conclusion on Actions to be Taken Over Next 5-Year Monitoring Period

Section f in the above outline includes the Plan Performance and Monitoring results. The first Plan Performance Evaluation Report is estimated to occur by spring/summer 2016 to coincide with the 2015 update of UWMPs and to allow sufficient time to develop a robust database to support the overall IRWM Plan Performance and Monitoring program.

J.5 MONITORING PLAN BUDGET PROCESS

The first year's monitoring activities are set by the District Board of Supervisors with support from the RWMG and WRAC. With the available budget being the constraining factor to the level of effort associated with plan performance and project monitoring, the District provides a reasonable annual monitoring plan knowing that not all of the monitoring elements described can be met, and assuming voluntary efforts by partnering agencies are used to their fullest extent.

Every year the RWMG meets to discuss the prior year's monitoring activities, the total costs incurred, and how the monitoring data is being used in the long-term water resources management of the Region, and to the betterment of the IRWM program. District staff seeks to prepare a sustainable (and meaningful) monitoring plan presenting the proceeding year's expected level of effort, and the estimated budget to complete the required monitoring requirements.

The section's monitoring elements are to be used as a reference and revised in the continued growth of the monitoring effort, especially as technology can reduce future costs over time. The 5-year reporting outline above communicates the importance of the monitoring data and why the state requires monitoring of the Region's water resources for purposes of positive change with their investment in the IRWM process (i.e., planning and implementation). Every attempt at acquiring funding through local, state, and federal sources should be made to meet the Region's monitoring goals by 2035.

