Section J: Plan Performance and Monitoring

The intent of the Plan Performance and Monitoring standard in the Proposition 84/1E Integrated Regional Water Management (IRWM) Program Guidelines is to ensure that:

- The Regional Water Management Group (RWMG) is efficiently making progress towards meeting the objectives of the IRWM Plan;
- The RWMG is implementing projects listed in the IRWM Plan; and that
- Each project in the IRWM Plan is monitored to comply with all applicable rules, laws, and permit requirements.

This section addresses the first two requirements listed above. The third requirement of the standard is addressed as part of the regular project review process (described in Section F); each project submitted for inclusion in the IRWM Plan is carefully reviewed by the RWMG to ensure that it complies with all applicable rules, laws, and permit requirements before it can be approved for inclusion in the Plan. As projects get implemented, they will continue to be monitored to ensure compliance with all applicable rules, laws, and permit requirements.

This section outlines the general process that is used for IRWM Plan performance and project monitoring. Project-specific details are not included in this section, but will be made available on the Greater Monterey County website (http://www.greatermontereyirwmp.org/) following each Plan Performance Review.

J.1 PLAN PERFORMANCE

A Plan Performance Review will be conducted every two years or as appropriate to evaluate progress made toward achieving Plan objectives. The Plan Performance Review will be prepared by the IRWM Plan Coordinator, or in the absence of a Coordinator, by a subcommittee of the RWMG. Progress toward meeting Plan objectives is directly tied to the implementation of projects. The implementation of projects, along with associated monitoring data, will be tracked using a Data Management System (DMS) that takes advantage of database systems developed by statewide efforts. Because the Greater Monterey County IRWM Plan does not have an ongoing secure funding source for data management, the RWMG has opted to utilize existing State database frameworks including, for surface water quality, those developed by the California Surface Water Ambient Monitoring Program (SWAMP) and by the California Environmental Data Exchange Network (CEDEN). Wetland and riparian habitat conditions will be measured and documented using the California Rapid Assessment Methods (CRAM), and groundwater data will reside in GeoTracker using the Groundwater Ambient Monitoring and Assessment (GAMA) database (see the Data Management section for a detailed description). The IRWM Plan Coordinator will work closely with the Data Management Coordinator (or in absence of a Data Management Coordinator then a subcommittee of the RWMG) to track project implementation.

Two tables will be generated with each Plan Performance Review that address the first two requirements of the standard, i.e., that the RWMG is implementing projects listed in the IRWM Plan, and that the RWMG is efficiently making progress towards meeting the objectives of the IRWM Plan. The first table will simply list all of the projects in the IRWM Plan, their implementation status, and funding source. Projects that have been fully implemented will be highlighted, as follows:

Table J-1: Status of Project Implementation

Project Proponent & Project Title	Funding Source		Date of Implementation/Status
	IRWM funds $	Other funds $ (cite source)	
1. xxx			Not yet implemented
2. xxx	$xxx	$xxx EPA 319(h) grant; $xxx	Phase I completed August 2012, in initial stages of Phase II
3. xxx			Not yet implemented
4. xxx		$xxx (USDA Farm Bill grant)	Project fully implemented, completed April 2012
5. xxx	$xxx	$xxx (EPA CWSRF funds)	Project near completion, September 2012
6. xxx			Not yet implemented
Etc.			

The second table will help chart the progress of the projects that have been implemented, or are in the process of being implemented, toward achieving IRWM Plan objectives. The table will be populated by a Conservation Action Tracker database, which is a data system for tracking land-use management improvements in the Central Coast region. It is an online tool (currently under construction) that will allow project proponents to register and update information on conservation projects across the region in order to track efforts and improve stakeholders' ability to evaluate collective impacts and effectiveness. The Conservation Action Tracker will be implemented by the Central Coast Resource Conservation Districts (RCDs) and project partners of the Greater Monterey County IRWM Plan.

Table J-2 below provides a template of the table that will be completed during each Plan Performance Review using the Conservation Action Tracker online tool. The measurability criteria for objectives (defined in Section D of this IRWM Plan) will be documented through the Conservation Action Tracker to help track the extent to which projects are achieving Plan objectives and implementing the IRWM Plan. Results will be brought to the RWMG for review and discussion.

Table J-2: Progress toward Achieving IRWM Plan Objectives

Objectives	Qualitative Measurement	Quantitative Measurement
WATER SUPPLY OBJECTIVES		
Objective 1: Increase groundwater recharge and protect groundwater recharge areas.		
Project X	List how project is meeting obj	List how project is meeting obj
Project Y	List how project is meeting obj	List how project is meeting obj
Project Z	List how project is meeting obj	List how project is meeting obj
Objective 2: Optimize the use of groundwater storage with infrastructure enhancements and improved operational techniques.		
Project title(s) here	List how project is meeting obj	List how project is meeting obj
Objective 3: Increase and optimize water storage and conveyance capacity through construction, repair, replacement, and augmentation of infrastructure.		
Project title(s) here	List how project is meeting obj	List how project is meeting obj
ETC.		
WATER QUALITY OBJECTIVES		
Objective 1: Promote practices necessary to meet, or where practicable, exceed all applicable water quality regulatory standards (for drinking water, surface and groundwater quality).		
Project title(s) here	List how project is meeting obj	List how project is meeting obj
ETC.		

FLOOD PROTECTION OBJECTIVES		
Objective 1: Promote projects and practices to protect infrastructure and property from flood damage.		
Project title(s) here	List how project is meeting obj	List how project is meeting obj
ETC.		
ENVIRONMENT OBJECTIVES		
Objective 1: Support science-based projects to protect, improve, enhance, and/or restore the region's ecological resources, while providing opportunities for public access and recreation where appropriate.		
Project title(s) here	List how project is meeting obj	List how project is meeting obj
ETC.		
REGIONAL COMMUNICATION OBJECTIVES		
Objective 1: Facilitate dialogue and reduce inconsistencies in water management strategies/regulations between local, regional, state, and federal entities.		
Project title(s) here	List how project is meeting obj	List how project is meeting obj
ETC.		
DISADVANTAGED COMMUNITIES OBJECTIVES		
Objective 1: Seek funding opportunities to ensure all communities have a water system with adequate, safe, high-quality drinking water.		
Project title(s) here	List how project is meeting obj	List how project is meeting obj
ETC.		
CLIMATE CHANGE OBJECTIVES		
Objective 1: Plan for potential impacts of future climate change.		
Project title(s) here	List how project is meeting obj	List how project is meeting obj
ETC.		

During each Plan Performance Review, the information in the above table will get updated and new projects will be added. The table will be accompanied by a narrative, which will summarize the overall progress to date in achieving IRWM Plan goals and objectives and describe areas that need further attention. The analysis will include data submitted to the statewide databases and information provided in the Conservation Action Tracker tool. Based on this analysis, the RWMG will evaluate how to fill the gaps and help achieve regional goals.

J.2 PROJECT-SPECIFIC MONITORING PLANS

If the project requires monitoring, the project proponent is responsible for both development of the project-specific monitoring plans and for all monitoring activities. There may be cases where project-specific monitoring will not apply, such as land acquisition or installation of purple pipe for reclaimed water.

There are two levels of development for the project monitoring plan. First, a general outline of monitoring requirements and design will be included in a project proposal for inclusion in the IRWM Plan; second, the monitoring plan and quality assurance project plan will be included in the scope of work in a funding proposal, and must be approved by the appropriate State agency prior to monitoring taking place for a given project.

The DMS for the Greater Monterey County IRWM region will include data validation and quality assurance for the set of standardized key metadata fields. The data system will provide a portal to data sets (measurements) hosted by the data generating organizations or those that have been integrated to regional, statewide, or national databases, including Wetland Tracker, CalDUCs, and CEDEN. For further details on this system please refer to Section K, the Data Management section of this IRWM Plan. The Data Management Coordinator, or in absence of a Coordinator then a subcommittee of the RWMG, will be responsible for ensuring that data gets uploaded to the appropriate State database.

The project-specific monitoring plan requirements will vary based on the type of project being implemented. All projects must adhere to certain State guidelines for monitoring in order to be implemented through the IRWM Plan. These include:

- Projects that involve surface water quality must meet the criteria for and be compatible with SWAMP, http://www.waterboards.ca.gov/water_issues/programs/swamp/tools.shtml).
- All projects that involve groundwater quality must meet the criteria for and be compatible with GAMA, http://www.waterboards.ca.gov/gama/).
- All projects that involve wetland restoration must meet the criteria for and be compatible with the State Wetland and Riparian Area Monitoring Plan (WRAMP, http://www.waterboards.ca.gov/mywaterquality/monitoring_council/wetland_workgroup/docs/2010/tenetsprogram.pdf)

Any projects that do not fall into one of the above categories must, at minimum, address the following:

1. Clearly and concisely (in a table format) describe what is being monitored for each project. Examples include photo monitoring, water depth, flood frequency, and effects the project may have on habitat or particular species (before and after construction), etc.
2. Measures to remedy or react to problems encountered during monitoring. An example would be to coordinate with the Department of Fish and Game if a species or its habitat is adversely impacted during construction or after implementation of a project.
3. Location of monitoring (with a map).
4. Monitoring frequency.
5. Monitoring protocols/methodologies, including who will perform the monitoring.
6. Procedures to ensure the monitoring schedule is maintained and that adequate resources (budget) are available to maintain monitoring of the project throughout the scheduled monitoring timeframe.

Through project-specific monitoring efforts, the Conservation Action Tracker, and measurable objectives, the RWMG intends to demonstrate over time that the Greater Monterey County IRWM Plan is meeting its goals and objectives. Note that the Plan Performance Review includes an adaptive management process that will enable the RWMG to respond to lessons learned from the project monitoring efforts and to utilize new information, particularly as new data regarding climate change impacts and vulnerabilities for the Greater Monterey County region become available. With this information, the RWMG may choose to modify IRWM Plan objectives, the measurability of those objectives, the use of resource management strategies, or the project review process; and these decisions will, in turn, dictate the types of projects that will be prioritized and implemented in the future.