

Chapter 9 Strategy Implementation

Data Management

Managing water resources data at a watershed-wide level in a centralized and consistent manner, and providing access to this information to key stakeholders and the public at large is key for the implementation, monitoring and updating of the OWOW Plan. Properly managed data helps SAWPA and other agencies and stakeholders in the watershed to identify water quantity and quality issues, assess and develop potential solutions, quantify the anticipated impacts of these solutions, and measure the extent to which anticipated impacts materialize. In addition, having a single depository of data with a consistent format allows the sharing of information among stakeholders, and the integration of watershed data with other databases at the State level.

SAWPA already provides tools for the watershed that facilitate the management, dissemination and integration of data. The emphasis of tool development has been the use of electronic reporting into an easily queried database. These tools can be further enhanced in the context of the OWOW Plan, and become a source of data for future studies and for the monitoring of the impact of the plan and specific projects in reaching the plan objectives. However it should be noted that any project list of projects is dynamic. Projects are continuously refined and redefined between inception and implementation. The list reflects a response to conditions at a particular time. As the OWOW process encourages collaboration and the development of multi-benefit, multi-purpose projects, a project list also can serve as a tool to identify new partners or project synergies. To remain as viable planning tools and be relevant to available funding sources, project lists should be updated regularly. Using the electronic data submission format from the first round of project submittals, it is possible to regularly update project information. With this information, the Steering Committee can track the Watershed's progress in meeting OWOW goals. They also can be responsive to other regional planning opportunities.

One such tool is the Santa Ana Watershed Data Management System (SAW DMS), developed by SAWPA under contract with the State Water Resources Control Board. SAW DMS is a watershed-wide data management structure that supports programs and research that evaluate and promote the health of water quality in the watershed. The database incorporates data from existing systems as well as data not currently managed as part of a larger system. The project also includes a Web portal whereby users can access the data via the Internet.

The database manages data associated with watershed-wide Ambient Groundwater Recalculation (AWQ). This data includes well information (location and construction), groundwater level, and groundwater quality. A custom data portal application (GIS Data Query Tool) allows users to access and download the data from a Web portal on the SAWPA Website. The database and Web portal were installed on the SAWPA computer network in August 2005.

In addition, SAW DMS includes data for the Santa Ana River Annual Water Quality Report (SAR) and data for TMDL efforts in the San Jacinto and the middle Santa Ana River. Data update processes were made more efficient through the development of standard data exchange templates, or Electronic Data Deliverable (EDD) templates, and coordination with agencies to provide data using

these templates. Data loading and quality control tools were then built to efficiently load data into SAW DMS using the EDDs. Reporting and query tools were developed to streamline reporting tasks for the AWQ and SAR projects. The Web portal developed in Phase I also was expanded to include additional data content, and the GIS Data Query Tool was enhanced based on user comments. Data in SAW DMS

is in a format compatible with the State Surface Water Ambient Monitoring Program (SWAMP).

SAWPA will continue improving its database in terms of types of data to be included, ease of uses, accessibility, and compatibility with other relevant databases in the State.

Plan Performance and Monitoring

SAWPA will develop a plan to monitor the implementation of the OWOW Plan and the specific projects herein included. The monitoring will take place at two levels, plan and project, to:

- Ensure progress is being made toward meeting the objectives of the Plan.
- Ensure specific projects identified in the Plan are being implemented as planned in terms of schedule, budget, and technical specifications.
- Identify potential necessary modifications to the Plan or to specific projects, in order to more efficiently and effectively accomplish the goals and objectives of the Plan.
- Provide transparency and accountability regarding the disbursement and use of funds for project implementation.

The project sponsor will be responsible for providing the information necessary to conduct the monitoring and collaborate with SAWPA and other stakeholders in the Watershed in the identification of adaptive measures.

Program management and project administration will be performed by SAWPA, upon receipt of funding, following a process similar to the one used for projects funded through Propositions 13 and 50. Through this process, SAWPA expects to achieve, as a minimum, the same level of success in implementing projects to further the goals of the OWOW Plan. As with SAWPA's past efforts, this process consists of measures to ensure consistency in the review, preparation, and submission of all documentation pertaining to grant funded projects, and to meet the objectives of the California Department of Water Resources (DWR) and State Water Resources Control Board (SWRCB), as well as the goals of the OWOW Plan.

SAWPA will serve as administrator for agreements between State Agencies and SAWPA, as well as program manager for the various programmatic requirements and related activities required through these agreements. SAWPA's authority and administrative policy to serve as program manager for such agreements was granted by the SAWPA Commission in April 2001. This authority provides SAWPA the means to implement the specific terms and conditions of the sub-agreements which the implementing parties must follow.

Monitoring at the plan level

SAWPA, with the support of stakeholders in the watershed, will evaluate the performance of the OWOW Plan in terms of accomplishing the plan objectives and targets. While objectives are

overarching principles that guide water sustainability in the watershed, targets are more specific and measurable, and can be mapped to specific objectives of the plan. For this reason, plan performance indicators are aligned to individual targets. Nevertheless, it is important to point out that some targets are difficult to quantify (e.g. increase resource efficient land use). **Table 9.1** shows the performance indicators to be used.

It is anticipated that plan performance will be evaluated every two years. SAWPA will lead the effort, but active support from many stakeholders in the Watershed will be required to provide data and information, as well as insight.

Results of the bi-annual evaluation will be published by SAWPA in the OWOW Webpage, and will include the use of visual tools (i.e. dashboards) to show progress to date in achieving the plan targets.

Table 9.1 Plan Performance Indicators for Targets

Plan Objectives	Plan Targets	Plan performance
Provide reliable water supply	Recycle and reuse 100% of wastewater	Percentage of effluent in watershed being reused
Promote sustainable water solutions	Store water to account for half of watershed demand for 3 years	Percentage of watershed 3-year demand in storage
Use rainfall as a resource	Reuse all of Santa Ana River flow at least once	Percentage increase in recycling
	Reduce potable water use by 20%	Percentage of water use reduction versus 2010 baseline
	Capture and recharge 80% of rainfall	Percentage of rainfall being captured and/or recharged
	Reduce GHG emissions from water mgmt activities	Tons of CO ₂ e mitigated or sequestered
	Assure adequate water supply and safe wastewater treatment and disposal	Percentage decrease in disadvantaged communities
	Provide benefits and avoid adverse impacts to disadvantaged communities and Native American tribes	Number of projects completed in disadvantaged or Native American communities
Preserve and enhance the environment	Fill gaps in riparian corridors to provide wetlands and linkages between open space and natural habitat	Percent reduction in riparian corridor gap
	Meet California FloodSAFE goals & construct soft bottom flood systems	Miles of soft-bottomed flood system and acres protected
	Increase resource efficient land use	Percent land area using water efficient land use principals
Ensure high quality water	Meet all water quality standards	Number of TMDL's listed.
	Remove salt from watershed to improve salt balance	Tons of salt removed from the watershed
Provide recreational opportunities	Complete the SAR Trail and connect all tributary corridors to	Percent reduction in SARI Trail corridor gap
Provide economically effective solutions	Not applicable	Not applicable
Improve regional integration & coordination	Increase active participation in the Watershed	Not applicable

Monitoring at the project level

In addition to monitoring the performance of the OWOW Plan as a whole, the performance of specific projects in the OWOW Plan receiving funding will be evaluated every six months. The evaluation will be led by SAWPA but will require extensive participation for the sponsor of the project in question.

Similar to the performance review at the plan level, the project performance review will be based on performance measures developed from the performance measures used to evaluate project applications. **Table 9.2** shows the project performance evaluation measures to be used.

Table 9.2 Project Performance Evaluation Measures

Project evaluation criteria	Sub-criteria	Performance measures
1. Provide water supply benefits	1.1 Reduce water demand	1.1 Percent of anticipated water demand reduction achieved
	1.2 Increase water reuse in watershed	1.2 Percent of anticipated effluent reuse
	1.3 Increase water storage in the watershed	1.3 Percent of anticipated water storage
	1.4 Create new local water supply	1.4 Percent of anticipated new water supply created
2. Provide restoration and flood management benefits	2.1 Create or restore riparian habitat	2.1 Percent of anticipated habitat creation or restoration
	2.2 Create or restore soft-bottom flood control systems	2.2 Percent of anticipated soft-bottom restoration
3. Provide water quality and salt management benefits	3.1 Meet all applicable water quality standards	3.1 Compliance with applicable water quality standards (yes/no)
	3.2 Improve salt balance in the watershed	3.2 Percent of anticipated salt removal
4. Provide recreational benefits	4.1 Provide recreational benefits	4.1 Percent of anticipated recreational trails created
5. Provide benefits and avoid adverse impacts to disadvantaged communities and Native American tribes	5.1 Provide benefits and avoid adverse impacts to disadvantaged communities	5.1 Percent of anticipated number of people benefited
	5.2 Provide benefits and avoid adverse impacts to Native American tribes	5.2 Percent of anticipated number of people benefited
6. Reduce greenhouse gas emissions from water management activities	6.1 Reduce greenhouse gas emissions from water management activities	6.1 Percent of CO ₂ eq mitigated versus target
	6.2 Provide carbon sequestration	6.2 Percent of CO ₂ sequestered per year (tons) versus target
7. Adherence to project schedule and budget	7.1 Adherence to project schedule	7.1 Degree of adherence to project schedule
	7.2 Adherence to project budget	7.2 Degree of adherence to project budget

Results of the semi-annual project evaluation will be published by SAWPA in the OWOW Webpage, and will include the use of visual tools (i.e. dashboards) to show the progress to date in the implementation of each project.

Project implementation tracking

As part of SAWPA's process to provide program management and administration of projects through the integrated regional water management planning process SAWPA has instituted a series of measures to assure technical and economic feasibility, as well as, environmental compliance for each project as following:

CEQA Review

SAWPA will obtain all documentation needed from the CEQA lead agency to understand the project, as well as the requirements for environmental compliance or mitigation. SAWPA will review available information for compliance with CEQA and confirm that the necessary measures for compliance or mitigation have been addressed.

Schedule and Budget Tracking

SAWPA is required to periodically compile, summarize, and update schedule and budget information for all contracted projects. The purpose of maintaining and tracking project schedule and budget is to have readily available program and project information.

SAWPA maintains an automated Program Information Management System (System) to maintain and track data on the program, its projects, and their phase tasks and status. The following steps summarize the documentation required for schedule and budget tracking and maintenance:

- The Construction Agencies will prepare and submit cash flow projections, budget forecasts, and schedule information for each contracted project.
- Cash flow projections will be submitted for the remainder of the project period.
- Project schedule information including schedule of each phase and task of work completed will be submitted in accordance with the work breakdown structure for the project.
- Compile and summarize schedule and budget information into the System.
- Update schedule and cash flow projection information to the System at least once per quarter.

Site Visits

SAWPA staff performs site visits to better understand project progress, issues, and schedule. The Constructing Agency must ensure that the Grant Funding Agency, or any authorized representatives thereof, has suitable and reasonable access to the project site at reasonable times during project construction, and thereafter for the useful life of the project.

Documentation Requirement

Each Construction Agency is required to submit project documentation to assure compliance with the less specific terms of the agreement entered into between SAWPA and the individual Constructing Agency.

Periodic Review and Evaluation

SAWPA will perform a project review or otherwise evaluate any project to determine compliance with the project funding criteria and requirements at any time, or if questions about the proper use or management of the funds arise as indicated in the agreement.

Agreement Deliverables

Agreement deliverables required per the Program Management and Administration Agreement include project status reports for the Grant Funding Agency (submit monthly), quarterly reports (submit 30 days after the end of each quarter ending January, April, July, and October, for the duration of the contract), public outreach documents, program newsletters, and other documents.

Invoice Procedure

SAWPA uses an internal invoice review checklist to insure that all invoices and progress documentation submitted by the Constructing Agencies meet SAWPA's, as well as the Grant Funding Agency's, requirements. The purpose of the invoice review checklist is to ensure that invoice documents provided by the Constructing Agencies are complete and accurate.

SAWPA, through its contract with each Construction Agency, requires the Constructing Agency to:

- Maintain books, records, and other material relative to the Project in accordance with generally accepted government accounting standards.
- Retain books, records, and other material for a minimum of three years after Project completion.
- Make available books, records, and other material at all reasonable times for inspection, copying, and audit by the Grant Funding Agency or State auditors, or any authorized representatives thereof.

Audits

The Grant Funding Agency is authorized to review and obtain copies of all SAWPA's records pertaining to the Memorandum of Understanding and subsequent contracts. To manage SAWPA finance department workflow and minimize program cost, the Grant Funding Agency will give SAWPA 30 days notice, if possible, for any detailed audit or time-consuming review of financial information.

Closeout

SAWPA has developed a project closeout procedure to ensure that each project is closed in a manner that provides an auditable file. This procedure includes verifying completion of all required closeout activities and receipt of all needed documents and certifications upon completion of the project.

Each project will utilize the project closeout procedure provided for in the agreement. SAWPA will review and approve the completeness of the closeout process and transmit a completed project notice for approval from the Grant Funding Agency.

Additionally, SAWPA maintains Project accounts in accordance with generally accepted government accounting standards. The following activities have been implemented:

- Establish an official Project file.
- Maintain separate accounts that depict all amounts received and expended on the Project, including all grant funds received.
- Maintain separate accounts that depict all income received which is attributable to the Project, specifically including any income attributable to grant funds disbursed under this contract.
- Maintain an accounting system which accurately depicts final total costs of the Project, including both direct and indirect costs.
- Establish accounts and maintain records as necessary for the State to fulfill reporting requirements, including any and all reporting requirements under federal tax statutes or regulations.

Adaptive Management

In as much as this Plan presents a snapshot of the innovative projects and summarizes the plans and projects of many agencies, it will age quickly. The dynamic nature of projects and plans in the Watershed will result in the need for frequent updates. Because the Plan will be used by agencies in the Watershed to help integrate individual plans and to focus funding opportunities on projects that are most effective and ready to proceed, the information contained in the Plan must remain current to be effective.

In recognition of the ever changing aspects of the planning process, the OWOW Plan will be updated and refined every three to five years. The Plan update will take into consideration recent development in the Watershed, such as projects implemented since the last review, and new understanding of the Watershed issues. Furthermore, the results of the bi-annual performance review will be used to identify potential modification to the Watershed strategy. Through a number of Task Force efforts, significant data are collected reflecting surface, ground and stormwater quality, as well as, habitat data. Integrating this data set into a database that can receive input and readily be queried is the goal of the data management system. As SAWPA manages the database, they will develop quality assurance/quality control protocols specific to each data set to ensure validity.

Additionally, revisions to this Plan's strategies aimed at sustainability of the Watershed will develop over time forming a culture for the Watershed community. Future revisions of this document will capture these developments, new projects that are created, and projects currently listed that develop and evolve.

As new funding opportunities arise to support the implementation of the remaining water resource projects, SAWPA will continue to pursue these opportunities. With the support of local and State agencies, further progress can be made in meeting long-term goals of water sustainability for the region and the State.