Bond Money At Work: An Update of The State Water Resources Control Board

The State Water Resources Control Board’s (SWRCB) financial assistance has improved water quality.

The State of California is geographically diverse, abundant in natural resources, and has a population of over 35 million people. The most essential natural resource in the state is its water supply. Water quality, groundwater supplies, and clean beaches are all being impacted and threatened by the activities of the state's populace. The State is making a concerted effort to improve water quality, improve water use efficiency, and maintain clean beaches through passage of recent bond measures that provide funding for these critical areas. The SWRCB and the nine Regional Water Quality Control Boards (RWQCBs) administer numerous grant and loan funding programs from these bond measures for the purposes of improving water quality, water recycling, implementing watershed programs, and monitoring groundwater. This report highlights some of the programs and projects that have achieved significant water quality improvements through use of the SWRCB’s bond funds.

$737 Million in Grants Awarded by the Water Board

$561 Million in Grants In Process by the Water Board

Clean Beaches Ensure A Healthy and Prosperous California

California’s coast offers year-round recreation and attracts more than 175 million visitors annually from all over the world. More people visit California beaches than visit beaches in all other states. Monitoring programs indicate that beach pollution often requires posting and closure of beaches for swimming and recreation.
The Clean Beaches Initiative grant program began in July 2001 with the goals of eliminating or significantly reducing exposure to fecal bacteria at California’s public beaches and reducing the number of days our beaches were closed. The program started with $32.3 million from Proposition 13 and received an additional $43.7 million January 1, 2003, from Proposition 40 for projects to reduce bacterial pollution.

Clean Beaches projects are recommended for funding by an independent advisory group, the Clean Beaches Task Force, appointed by the State Water Resources Control Board. Most Clean Beaches projects involve diverting or treating urban runoff. Other projects include management practices to reduce runoff, sewer improvement projects, water circulation studies, and studies to identify where the pollution comes from.

Here is a snapshot of where the money is going:
- Seventeen Proposition 13 projects have been completed and 19 are under construction.
- Proposition 40 funds have been divided into two phases.
  - To date $19.6 million from Proposition 40 has been committed to 27 projects.
  - Ten Proposition 40 projects have been constructed, and the rest are in design or construction.
  - The remaining $24.1 million from Proposition 40 will be committed before December 31, 2006, to projects at beaches with chronic bacterial pollution.

Notable outcomes:
- The ultraviolet (UV) light disinfection system constructed by the City of Encinitas treats 85 percent of the flow in Cottonwood Creek before it discharges to Moonlight Beach. The system has removed 99 percent of the bacteria in the treated flow. Encinitas has seen a 90 percent drop in beach postings during the two years the system has been in place, and believes the system has been responsible for this decrease in beach postings.
- The Addie Street lift station in the City of Pismo Beach had recurring sewage spills that closed Pismo Beach to the public. In June 2002, Pismo Beach modernized the lift station with Clean Beaches funds, preventing sewage overflows and beach closures.
- The City of Dana Point installed an urban runoff diversion in a storm drain that discharges to Doheny State Beach. Dana Point believes that the diversion partially contributed to a decrease in postings at Doheny Beach between the 2002 and 2003.
- Before committing to engineering solutions to address elevated bacteria in Mission Bay, the City of San Diego needed to clearly identify the source of the bacterial problem. A study, funded through the Clean Beaches Initiative indicated that birds are the predominate source of bacteria and only five percent of the samples from the Bay were from human sources. This information will help San Diego refine management practices to protect the health of swimmers in the Bay, and assist in managing water quality at other enclosed water bodies statewide.

Solving Today’s Water Quality Problems Requires Partnerships with Local Groups
The SWRCB has tailored its Nonpoint Source Pollution Control and Watershed Protection grant programs to attack water quality problems at the local level by working with local and regional watershed groups. This local level focus produces community-based solutions that address the multitude of land and water use activities that impact water quality. The types of
projects include habitat protection or restoration, flood control, education and outreach, fisheries restoration, erosion control, and waste and storm water treatment.

Example Projects:

- A $1 million grant to the Sonoma County Water Agency for nine environmental improvement projects in the Russian River Watershed. Project activities included education and outreach, erosion control and stream bank stabilization, riparian restoration and revegetation, and fisheries habitat improvement. These projects resulted in significant trash, sediment, and temperature reductions in the river.

- With a $4 million grant, the City of Huntington Beach constructed low flow diversions to the sanitary sewer, installed flood control structures, installed in-line storm drain trash and debris catchment structures, and rehabilitated existing storm drainage structures. The project significantly reduced the likelihood of urban stream and coastal water contamination, and no beach closures have been reported since this work was completed.

**Augmenting Water Supply by Recycling Water**

Water recycling projects receiving SWRCB funding have increased the use of recycled water by 105,000 acre-feet per year (the amount of water used by 300,000 homes per year). Since the mid 1980s, the SWRCB has distributed $65 million in grants and $341 million in low interest loans for water recycling projects. In 2005, the SWRCB will award the remaining Proposition 50 grant funds, increasing total grants to $107 million.

SWRCB funding of water recycling projects has significantly contributed to the increase in water recycling efforts statewide, as shown in the graph below:

**What is the indicator showing?**

Wastewater recycled at wastewater treatment facilities increased by approximately 25 percent in three years. In 2002, the amount of recycled water use was equivalent to the annual water supply needs of over 2,100,000 people.
Examples of SWRCB-funded projects:

- The San Ramon Valley Recycled Water Program is a multi-phase project to supply recycled water to portions of the Dublin San Ramon Services District and the East Bay Municipal Utility District service areas. This recycled water project will serve large irrigation customers - both existing and new - including parks, golf courses, business parks, greenbelts and roadways.
- The Orange County Water District’s Ground Water Replenishment System Project will use recycled water for sea-water intrusion control and water supply. The project will take treated municipal wastewater and treat it with advanced purification to meet or exceed drinking water standards. The water will be used to expand an existing underground seawater intrusion barrier. The Groundwater Replenishment System will also provide a new, drought-proof, water source for north and central Orange County, thereby reducing reliance on imported water.

Grants to Help Small, Disadvantaged Communities with Their Wastewater Treatment Needs

The Small Community Wastewater Grant (SCWG) Program provides grant assistance to small communities with financial hardship, needing to install or upgrade failing wastewater treatment facilities. Disadvantaged communities face greater challenges when trying to provide facilities that will ensure public health and water quality protection. SCWG Program funds are some of the most sought after; funds go quickly. In the last eight years, the program provided assistance totaling $60 million for projects such as installing sewers, upgrading failing treatment plants, and repairing leaking sewer pipes.

To best suit the financial needs of these communities, the SCWG Program offers three types of grants: Planning, Design, and Construction. Grants for planning and/or design enable communities to accomplish the critical first steps toward making their proposed project a reality. Bond funds for construction, while relatively scarce, are highly valued by these disadvantaged communities. The following table shows the breakdown of grants issued:

<table>
<thead>
<tr>
<th>Number of Grants Issued</th>
<th>Total Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>$3,600,000</td>
</tr>
<tr>
<td>Design</td>
<td>$5,200,000</td>
</tr>
<tr>
<td>Construction</td>
<td>$51,200,000</td>
</tr>
</tbody>
</table>

Examples of SCWG funded projects:

- The City of Westmorland's wastewater treatment ponds were leaking into groundwater used for household water supply. The City used grant funds, totaling $1,880,417, to construct new treatment facilities and close out the ponds.
- Old sewer lines leaked, and septic tanks failed, in the Garberville Sanitary District. The District utilized $1,264,471 in grants to replace the sewer lines, install a collection system, and stop sewage from threatening the groundwater.
- Raw sewage overflows, from a 60-year-old collection system in the City of Weed, needed to be stopped. SWRCB provided Weed with $3,000,000 in grants to replace a substantial portion of their collection system and correct problems at their treatment facilities.
The SWRCB selects projects that will improve water quality.

In selecting projects for funding, the SWRCB focuses on the following issues:
- Selecting projects that will improve water quality.
- Using a process that is fair and open.
- Moving as quickly as possible.
- Environmental Justice, the needs of disadvantaged communities, geographic distribution, coordinating with other funding programs, and projects mutually benefiting other agencies’ missions.

Guidelines for Funding
SWRCB financial assistance programs are administered using Guidelines. Guidelines are developed by involving in-house and external technical experts in the initial phases, to ensure that a sound technical basis is laid for funding criteria and focus. Next, interested parties are consulted to ensure that the desired results will be achieved. Finally, workshops are used to solicit comments from all interested parties. The Guidelines are then adopted by the SWRCB in an open and public process.

A recent example of this participatory process is the Agricultural Water Quality Grant Program. A work group including SWRCB technical staff, staff from other interested State and federal agencies, and University of California agricultural specialists, developed the basic program concepts. The Program’s objective is to assist agricultural groups with compliance with discharge waiver programs at the RWQCBs. Program concepts were presented and discussed at three workshops in Sacramento, San Luis Obispo and Brawley where many of those subject to the waiver programs attended. Based on the comments received the Guidelines were drafted and made available for comment through the Internet and at additional workshops. Final Draft Guidelines were adopted by the SWRCB at an open meeting on August 26, 2004.

Innovative Regional Approach
The SWRCB, through its Prop 13 Southern California Integrated Watershed Program, has funded $235 million for 23 multi-agency projects in the Santa Ana Watershed. This program tests a new model for integrated regional strategies for management of water resources to:
- drought proof the watershed
- improve water quality and security
- reduce dependence on imported water
The projects will add over 300,000 additional acre-feet of new water supply, eradicate over 3,000 acres of invasive arundo, upgrade dairy and municipal wastewater treatment and divert storm water runoff to improve water quality.

Soliciting Proposals
The SWRCB uses a variety of processes to solicit, review and select projects for funding. The solicitation process for a program is based on the goals of the program and the needs of the applicant community. These processes are transparent to the applicants and provide assistance (e.g. workshops to explain the process and application). Information about the process is widely distributed. The process includes clearly defined criteria and is coordinated with other agencies. The design of the process balances the need for applicant assistance and time to complete the application, with the need to make the funds available quickly.
Review and Selection
The most competitive projects are judged based on scientific and readiness merits. Review panels come from SWRCB, RWQCBs, and partner agency technical staff, and, when appropriate, members of stakeholder groups. Individuals are chosen to provide technical/scientific expertise, regional perspectives and multiple agency perspectives.

The SWRCB ensures funded projects improve water quality

The SWRCB uses a multi-faceted approach to ensuring the success of the projects it funds. The approach includes a 1) clear understanding of what will be done and when, documented in an agreement, 2) management of the agreement/project during implementation, 3) post implementation water quality monitoring, 4) an effectiveness assessment, and finally 5) roll up of project results to higher level performance measures and indicators.

The SWRCB enters into grant agreements for selected projects to ensure the scope of work is in accordance with the project as selected by the selection panel. SWRCB/RWQCB staff monitor the project throughout implementation to ensure that work is conducted in accordance with the grant agreement. The RWQCB Project Manager reviews and approves all submittals, including invoices.

All grant projects must include a plan that shows how the success of the project will be measured. Each project must include specific measures that tie to environmental effectiveness. The SWRCB requires a final report upon project completion that summarizes the project and shows whether the purposes of the project were met. The report includes data collected to evaluate its effectiveness. For projects that include water quality monitoring, grantees must provide a monitoring and reporting plan.

SWRCB projects are selected to achieve water quality improvement priorities in our Strategic Plan and measures in our Environmental Protection Indicators for California. Water quality data collected are included in the Surface Water Ambient Monitoring Program or Groundwater Ambient Monitoring Assessment. The data are used by the SWRCB to report

Speeding Up the Contracting Process
In 2003 and prior, the SWRCB and RWQCBs were receiving complaints about time to process a grant contract (average time 20 months).

The SWRCB Executive Director, Celeste Cantú, convened the Grants & Contracts Workgroup and directed the group to evaluate contract processes and provide recommendations for streamlining contracts to ensure execution within six months of the SWRCB approval date, beginning with 2004 awards.

In order to reach the six-month goal, a major decision by the Workgroup was to replace contracts with grant agreements. A grant agreement is a simpler, streamlined document, yet still legally defensible. The SWRCB is seeing a marked improvement in the time it takes to process grant agreements. The average has gone from 20 months to nine months. The goal is to reach six months by the end of 2004 and continue to streamline and reach a two to three month turn around time.
on environmental achievements. The data are also used to determine impaired water bodies, in accordance with Clean Water Act Section 303(d), and to track water quality improvements.

The SWRCB makes the project information available to all stakeholders through a number of forums. Project summaries are included in the National Resource Projects Inventory database, and reports summarizing the grant programs’ many successes are prepared for the Governor and the Legislature.