Spreading the News

An Association of Ground Water Agencies Newsletter - Summer 1998

Member Spotlight

San Bernardino Valley Water Conservation District

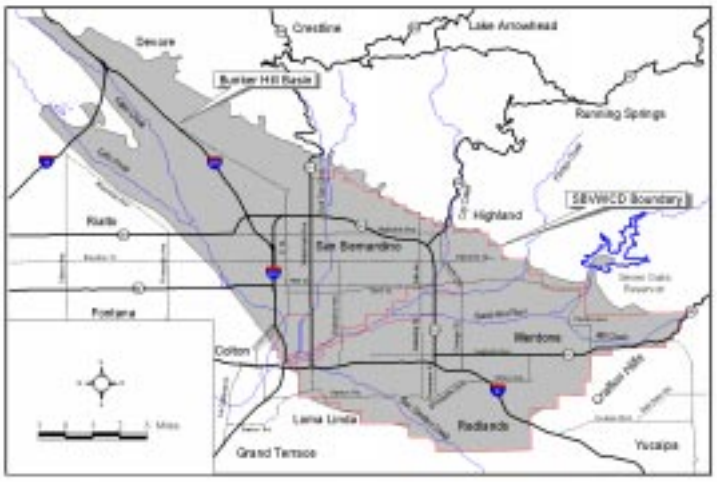
Created in 1932, the San Bernardino Valley Water Conservation District (District) ensures the native surface water supplies of the Santa Ana River and its tributaries in the San Bernardino Valley (Valley) are put to beneficial use or conserved in the Bunker Hill Groundwater Basin (Basin). The District boundaries represent about 60 percent of the Valley where the District owns and manages more than 3,650 acres.

The District uses the land to maximize local water supplies, thereby reducing dependence on more costly imported water. It operates a series of percolation basins in the Santa Ana River Wash and adjacent to Mill Creek. Here, storm runoff, snow melt, and other water not taken by prior water rights holders, are captured for recharging the Basin. The Basin meets approximately 85 percent of the Valley's water demand annually, providing more than 200,000 acre-feet to the local municipalities of Redlands, Highland, Loma Linda, San Bernardino, Riverside, Colton and Rialto, along with several public and private water agencies, and most Valley citrus farmers. The District serves a general population of 750,000 with some 250,000 within the District boundaries.

The District's management staff assure water is available for replenishing the Basin, and that land resources are available to accept the water. In its role of assuring water availability, the District serves as the honest broker (neutral party). Currently the District is facilitating discussions on contingency planning for drought years, or if the water is not available due to environmental or other reasons. Concurrently, the District is facilitating discussions with some 20 agencies who can influence land use in the replenishment zones. A Committee on Use of the Santa Ana River Wash is attempting to develop a Wash Plan for planning mining, environmental habitat, or water conservation activities. This coordination of water and land use planning helps assure sufficient water supplies.

The Seven Oaks Dam and potential water conservation reservoir are a major issue for the District. The final solution can affect the rate of water discharges and environmental habitat, which both impact the water percolation basins.

San Bernardino Valley Water Conservation District



Review of environmental documents by mining companies and Metropolitan's Inland Feeder Project EIR are critical activities affecting future use of the basin. In addition, the District is working with other agencies to better manage water levels through a high groundwater mitigation program. Water will be pumped into the River for use down stream to maintain recharging of native waters.

Association of Ground Water Agencies

AGWA Forms Groundwater Guardian Affiliate Team

The Association of Groundwater Agencies (AGWA) has joined the national Groundwater Foundation as a 1998 Groundwater Guardian Affiliate. As such, they will assist Groundwater Guardian Communities to address issues and promote shared responsibility to foster sustainable groundwater protection efforts.

According to Carol Williams, AGWA Groundwater Guardian Affiliate Team member and Executive Officer, Main San Gabriel Basin Watermaster, the Affiliate objectives are to support the development of new Groundwater Guardian Communities, draw attention to educational resources on groundwater issues, and provide technical assistance and support to existing Groundwater Guardian Communities.

"We've seen firsthand the positive impact Groundwater Guardian Communities can have on water issues," explained AGWA Chairman William R. Mills Jr. "AGWA's participation as an Affiliate will allow us to work together to combine individual successes to achieve even higher goals."

For more information and ideas on becoming a Groundwater Guardian Community, access the Groundwater Guardian corner of the AGWA web page at www.agwa.org.

Mojave Water Agency Working To Recharge High Desert Basin

The Mojave Water Agency (MWA) is awarding contracts to fabricate and install the next phase of a pipeline to transport State Water Project water from the California Aqueduct to several high desert communities. The water will flow to percolation ponds in Hodge and Lenwood by January 1999. Another phase of the project will activate recharge basins in Daggett and Newberry Springs by January of the year 2000.

When complete, the Mojave River Pipeline will be almost 71 miles long and extend from Baldy Mesa to Newberry Springs. Installation of the first 18 miles of the pipeline was completed in December 1997.

Since the 1950s, the high desert has been in a state of overdraft, meaning more water is used each year than nature replaces. In support of the project, Beverly J. Lowry, President of the MWA Board of Directors recently stated: "The Mojave River Pipeline is an essential step toward a physical solution to the overdraft. "

Financing for the Mojave River Pipeline comes from the state of California and the federal government. Engineering, design and management for the pipeline project are being performed by MWA staff.

Enforcing Pueblo Water Rights

Recently, the Upper Los Angeles River Area (ULARA) Watermaster has faced a legal challenge against enforcement of ULARA groundwater rights. Following a 24-year lawsuit, the rights were established in a California Superior Court decision (1979) referred to as the *San Fernando Judgment*.

A private party, illegally pumping groundwater, was brought before the Court to enforce and re-affirm Los Angeles' pueblo water rights. The Court ruled that the water belonged to Los Angeles and ordered the party to stop pumping. The next step is to continue enforcing the Judgment against other illegal pumpers that pump water primarily outside the City's boundary.

Conjunctive Use Topic of AGWA Workshop

Nominal Group Technique Workshop Participants

Promoting discussion of conjunctive use is a unifying theme among Association of Ground Water Agencies (AGWA) members and affiliates. Toward that end, 25 participants convened in a Nominal Group Technique (NGT) workshop May 27 - 29, 1998, to address the question *What are the most significant impediments to implementing a cost-effective conjunctive use water management program in California?* Organized by the National Water Research Institute, in partnership with AGWA and the Metropolitan Water District of Southern California, participants came away with a feeling of accomplishment and sense of advancing the issue to a better understanding among stakeholders.

Participants represented local, regional and state agencies, as well as the private sector, stemming from both northern and southern California. The NGT procedures led the participants to 1) identify the impediments; 2) consolidate impediments into major groups while minimizing overlap between groups; and 3) individually rank the ten highest priority impediments.

The Nominal Group Technique was developed to allow a group of individuals to meet and quickly come to consensus. The process does not allow for the usual delays that result from each taking time to establish his or her own credentials in the eyes of the group, or the dominance of the meeting by a particularly vocal individual(s). The technique also allows a group of individuals to address efficiently a question that could not be resolved satisfactorily by a single individual.

In AGWA's workshop, 89 impediments were identified, each presented in a group forum. Participants then were guided through a systematic discussion to pare down the 89 individual barriers to 26 major impediment groups. At the conclusion of the consolidation process, each participant completed a Priority Ranking Form, indicating their top ten impediments. The final result was a listing of the priority impediments. Priority one was "Inability of local and regional water management governance entities to build trust, resolve differences (internally and externally), and share control." Priority two was "Inability to match benefits and funding burdens in ways that are acceptable to all parties including third parties." Extensive discussions were held on the impediments, including approaches to overcome the barriers, throughout the process.

A workshop report that provides discussion points and a ranking summary has been published by NWRI. Copies may be obtained by calling 714/378-3278.

Raymond - San Gabriel Valley Basins Focus on Perchlorate

Like it or not, one of the groundwater contaminates *du jour* is perchlorate, a persistent inorganic chemical that was not even detected until April 1997. In response to discoveries in some wells, the Main San Gabriel Valley Basin Watermaster and the Raymond Basin Management Board have initiated a basin-wide perchlorate sampling program to determine the full extent of contamination in the San Gabriel Valley and Pasadena area.

Because perchlorate is inorganic, it is both costly and difficult to remove from water. At present, no proven and practical treatment process exists to remove perchlorate to the low levels required to meeting drinking water standards. Consequently, the discovery of perchlorate has brought Superfund clean-up plans to a halt while a treatment solution is found.

The Perchlorate Coordinating Team will identify and evaluate potential treatment technologies and begin laboratory and/or pilot scale testing. The team includes representatives from Raymond Basin Management Board, Three Valleys Municipal Water District, San Gabriel Basin Water Quality Authority, Metropolitan Water District, USEPA, DHS, RWQCB and industries associated with the groundwater contamination. In support of the approach, Ronald Palmer, Executive Officer of the Raymond Basin Management Board said: "Through this Team, local water agencies are working in a pro-active and cooperative approach to solve perchlorate contamination and treatment issues."

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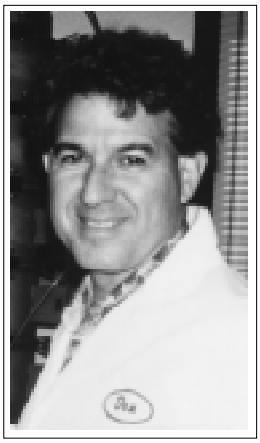
Article contributions are welcome. Please call: 714-378-3206
Visit the AGWA website at: www.agwa.org

OCWD Scientist Patents Biologically Activated Remediation Foam



Don Phipps

Don Phipps, a senior microbiologist with Orange County Water District (OCWD), has patented a process using foam to help clean industrial pollutants from soil, air and water. The process targets volatile organic compounds (VOCs) that include gasoline, benzene and other materials from automobile fuels, chemical manufacturing and industrial solvents. Such compounds frequently cause major environmental clean up problems.
Don Phipps' invention has received a U.S. patent for the new treatment process that uses a "biologically activated foam" to rapidly destroy airborne volatile contaminants. The foam forms a continuously renewable framework with a vast surface area to support and sustain microorganisms that convert harmful organic contaminants into harmless carbon dioxide, water and natural biological residue.

Phipps holds a BS degree in Biological Sciences from the University of California, Irvine and a MS degree in Life Sciences from the University of Nebraska, Lincoln. He has been with OCWD for nearly 13 years working on various research projects focused on groundwater production and clean up of contaminated water.

OCWD's Biotechnology Research Department, where Phipps works, applies the principles of both engineering and microbiology to solve complex groundwater contamination problems biologically. Biological methods developed at OCWD are intended to supplement or even replace more expensive chemical and physical treatment technologies.