

UNDERGROUND

Association of Ground Water Agencies Newsletter

Summer 1999

Chino Basin completes draft of basin management plan

Chino Basin Watermaster, on June 10, submitted the first draft of its Optimum Basin Management Plan (OBMP) to a court-appointed special referee.

Completion of the draft is a major milestone in the agency's effort to submit the OBMP by Sept. 30, 1999, a date imposed by the court. The initial hearing on the plan is set for October 28 in the Rancho Cucamonga branch of San Bernardino County Superior Court.

Responding to basin management concerns, the court, in February 1998, ordered development of the plan. It also ordered that the OBMP incorporate implementation elements of a program previously developed by a study task force.

In March 1998 an interim watermaster board of nine members was established. Since that time, working meetings have been held at least twice monthly to develop the OBMP according to guidelines imposed by the court and the special referee, Anne Schneider.

The initial draft plan addresses several major subjects including the current physical state of the basin; goals of the OBMP; management and implementation of the plan; and financial considerations of implementation.

The plan is intended to meet the need to enhance basin water supplies; to protect and enhance water quality; to provide better overall basin management; and to find a way to *equitably* pay the costs of implementing the plan.

Interested individuals can follow the process by visiting Chino Basin Watermaster's Internet site at www.cbwm.org. Updates are frequent and informative. Public meetings concerning development of the plan are normally held at 9:30 a.m. the

second and fourth Thursdays of each month at the watermaster offices, 8632 Archibald Ave., Suite 109, Rancho Cucamonga.

High Desert water awareness expo draws a crowd

A walk through a water wise garden, a display of low-flow showers and toilets, a wheel of fortune game for adults and a golf game for children were among the features of the Eighth Annual Desert Communities Water Awareness Expo in Victorville April 9-11.

The event was conducted during the region's annual Home and Garden Show.

Throughout the three days, crowds enjoyed the displays and activities at the Expo while receiving literature on water conservation and small promotional items intended to reinforce the conservation message.

High Desert communities rely primarily on groundwater with some replenishment from the east branch of the State Water Project aqueduct which flows through the Victorville and Hesperia area enroute to Lake Silverwood.

The expo is sponsored by a coalition of 11 area water districts and other parties who promote the public's knowledge and appreciation of water.

More information about the annual event is available on the Internet at <http://home.earthlink.net/~jpl315/ExpoSite.htm>.

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Please call: (909) 928-3777 x4383 or e-mail: heild@pe.net

Visit the AGWA website at: www.agwa.org

Plan helps water supply, quality in Santa Ana River watershed

An environmentally friendly alternative to surface water storage is groundwater storage or banking.

According to officials of the Santa Ana Watershed Project Authority (SAWPA), tremendous underground storage is available in the Santa Ana River watershed. SAWPA is attempting to gain financing and stakeholder support to implement regional groundwater banking.

The Santa Ana River flows through parts of four counties that are home to nearly five million people. The watershed produces about 800,000 acre-feet per year (AFY), making it the largest local supply in southern California.

SAWPA is proposing a regional program that will make the watershed entirely self sufficient during drought cycles. The proposal won't require increased imported water during normal years, thus further stabilizing the regional economy while improving water quality, officials say. It will also allow more water to be allocated to other urban areas, wildlife and agriculture during drought times.

SAWPA's proposal has five major elements, including storage of water from wet years in groundwater basins; desalting and treatment of contaminated groundwater for reclamation and reuse; enhancement of native habitat along the river; development of wetlands and open space; and conservation, including water use efficiency and reclamation.

The SAWPA program will clean up groundwater basins in the region to create storage for over a million acre-feet of new water, officials indicate. It will also construct up to nine new pumping stations and as many as 126 new wells to deliver the stored groundwater in drought years.

Construction of seven desalters is called for in

the program in order to clean out contaminants from the underground basins. SAWPA has been operating a successful desalter in the Arlington area of Riverside since 1990.

A non-native species of giant cane (*Arundo*) dominates about 10,000 acres of the Santa Ana River riparian habitat. SAWPA's plan will eradicate the cane and replace it with a native species.

With increased urbanization in many parts of the Santa Ana Region, the SAWPA plan calls for the creation of up to 900 acres of new wetlands and major open space to facilitate a balance between growth and the environment.

More water is recycled in the Santa Ana Region than in any comparable area in the United States. When fully implemented, SAWPA's plan would provide 200,000 AFY normal year yield and 500,000 AFY in dry years.



The next step, SAWPA officials say, is to find financing. It is believed local agencies will pay the lion's share of costs if projects are partially subsidized by state and federal agencies.

The estimated cost of the program over 20 years is substantial — about \$2 billion. Initial funding will come from local, regional, state and federal funds.

Currently, SAWPA is attempting to obtain \$430 million for the program from the proposed state-wide water bond expected to be on the ballot in March 2000.

SAWPA member agencies are Eastern Municipal Water District, Inland Empire Utility Agency, Orange County Water District, San Bernardino Valley Municipal Water District, and Western Municipal Water District.



A brief summary of AGWA Board actions since the last newsletter

(This is the first in what will be a continuing series of summaries to keep readers abreast of matters discussed and actions taken by the AGWA Board of Directors.)

June 21 The AGWA Board, meeting in Rancho Cucamonga, heard an overview of Metropolitan Water District's "Salinity Management Plan" presented by Eddie Rigdon. MWD's objective is to serve water at a TDS level of 500 ppm or better. It was noted that the Eastside Reservoir will initially fill (beginning in December 1999) primarily with Colorado River water but that a blend with State water will be achieved when the Inland Feeder project is completed learned that the recent prevailing wage decision by the California Department of Industrial Relations is being reviewed by department staff in the wake of numerous letters from concerned organizations. AGWA had written a letter on May 18 asking that the decision be reviewed because of apparent unintended adverse impacts, particularly in southern California decided to prepare a program for presentation at the biennial groundwater conference in September reviewed the final draft of a discussion paper on "Drought Benefits of Southern California Groundwater Basins" noted that the Groundwater Management Committee is collecting data on all groundwater basins in southern California in order for AGWA to function more effectively as a clearinghouse for groundwater information.

May 17 AGWA's Directors, meeting in San Gabriel, unanimously approved the organization's budget for FY 1999-2000, beginning July 1. The revenue and spending plan keeps membership dues at 98-99 levels and adds a new line item category for groundwater studies. Some \$10,000 in unexpended funds was carried over from 98-99. The new budget balances at \$40,442 learned that Mel Blevins represented AGWA at Orange

County Water District's Children's Drinking Water Festival in April, and that the annual event was highly successful heard a report from Ron Palmer regarding the on-going reorganization at Metropolitan Water District and learned that Joseph Tait has been appointed Assistant General Manager. They discussed several items regarding the future of MWD received a report from Groundwater Management Committee chair Rich Nagel indicating that the committee is working on developing a project to incorporate information from all groundwater basins into a single document learned from Mr. Nagel that the State will review 15 new constituents this year in order to establish public health goals for them were updated by Fred Fudacz regarding the state supreme court's pending review of the Mojave adjudication, for which a hearing is likely in September. About 20 amicus briefs were filed, mostly by farm groups interested in equity issues.

April 19 The Board of Directors, at its monthly meeting in Rancho Cucamonga, heard from Richard Atwater about Metropolitan Water District's Water Surplus and Drought Management Plan, adopted earlier this month. It was felt that future plans should better recognize the benefits to MWD of groundwater basins and the value of local groundwater management agencies. AGWA's leadership will schedule a meeting with MWD's new general manager, Ron Gastelum, to establish a sound working relationship unanimously expressed its support for federal legislation pertaining to funding of Colorado River salinity control measures. It was noted that the formation of a statewide salinity management coalition is proceeding, to work on legislative issues at both the federal and state levels discussed conjunctive use projects as related to the Delta and the CALFED program. Differences between the needs of northern and southern California agricultural interests were noted. AGWA will begin gathering conjunctive use data in order to provide a central source of information approved AGWA membership for the newly-established Six Basins Watermaster.

What's on **THE DOCKET?**

A periodic summary of positions AGWA has taken on legislative issues since the last newsletter.

(This new feature will appear in *The Underground* whenever there are legislative matters to report, or when AGWA has taken an official position on a pending piece of legislation.)

MTBE: At its April meeting, AGWA's board of directors unanimously agreed to support pending federal legislation to ban MTBE in gasoline. Since that time, much has happened. As this edition of our newsletter goes to bed, that federal legislation is languishing, and Congress' attention has been somewhat diverted. The California delegation, including Sen. Boxer and led on this issue by Sen. Feinstein, is raring to go with it, but other Senate leaders want to wait until the legislation can be amended to be a practical, national "fix" instead of aiming only at California. Bottom line according to WAGs in Washington: don't expect much until after a Blue Ribbon Task Force studying MTBE releases its report the latter half of July. The issue is legislatively complex with five different Senate bills and four House bills involved *Between a rock and a hard place* — As a side note, an article in the Bureau of National Affairs' *Daily Report for Executives*, June 18th edition, says a Canadian company is suing the U.S. for \$970 million under terms of NAFTA for California's decision to ban MTBE The AGWA board also voted to endorse the Association of California Water Agencies' (ACWA) position supporting state legislation seeking to ban MTBE from use in California. In May, the board wrote to the state Senate in support of Sen. Sher's SB 989, which would codify the governor's executive order phasing out MTBE by 2002 as well as provide funding to help accomplish the phase-out. As this edition of the newsletter is being written in late June, SB 989's fate looks good although it has been re-referred to the Senate Appropriations Committee. Strange things sometimes happen in these situations.

Groundwater Management: In June, AGWA wrote letters to state legislators in support of

Assemblymember Thompson's AB 303 (if amended), which establishes and funds a ground-water management assistance fund. AGWA's letter pointed out that, as written, the bill precludes watermaster organizations from receiving funds. This is probably an oversight in the drafting of the bill, but it is essential, in AGWA's view, that this oversight be corrected by amendment. The bill was in a Senate committee at the time of this writing, but it enjoyed strong, bipartisan support in the Assembly and is expected to pass the Senate as well, and the governor is expected to sign it.

Desalination: Also at the June meeting, directors voted unanimously to support Assemblymember Margett's AB 1605, which appropriates a yet-to-be-finalized amount of money to a number of organizations for research and demonstration projects related to desalination of brackish groundwater. Like the groundwater management bill mentioned above, AB 1605 received overwhelming support in the Assembly and was scheduled to be reviewed by the Senate's Agriculture and Water Resources Committee in late June. Senate passage is expected, as is the governor's signature.

Water banks are big business in Kern

Kern County, since 1995, has added four new and significant groundwater banking programs.

Semitropic Water Storage District Groundwater Banking Program; Arvin-Edison Water Storage District Water Management Program: The landmark 1995 Monterey Amendment to State Water Project contracts played a major role in overcoming obstacles to these water banking projects.

Semitropic's banking program involves use of State Water Project supplies by local growers "in lieu" of their pumping groundwater from the local aquifer. Program clients, all from outside Kern County, may bank up to one million acre-feet. Since 1995 about 400,000 acre-feet has been banked.

Arvin-Edison's local water management and conjunctive use program, benefitting district landowners, was expanded in 1998 by an agreement with Metropolitan Water District (MWD). In exchange for being able to bank up to 350,000 acre-

feet of water, MWD will reimburse Arvin-Edison for the capital improvements. About 75,000 acre-feet has been banked already and another 100,000 acre-feet is scheduled to be banked in 1999.

Kern Water Bank and KCWA Pioneer Project: The Kern Water Bank is the largest water banking program in the world. Once again, the Monterey Amendment played a significant role in achieving an agreement. KCWA and its member units negotiated a series of agreements for the Kern Water Bank. The agreements addressed groundwater monitoring procedures, evaporation and migration losses, project operations and project land use, and created a local groundwater monitoring committee.

A 20,000 acre parcel of land on the alluvial fan of the Kern River, the Kern Water Bank is ideally suited for groundwater recharge. A coordinated land-use plan maximizes both recharge and ecosystem functions. With the approval of a habitat conservation plan in 1998, the water bank went into full operation, and has banked more than 850,000 acre-feet of water since 1995.

Established in 1995, the Pioneer Project, comprising 2,250 acres on the alluvial fan of the Kern River, is owned and operated by Kern County Water Agency on behalf of ten participating districts, which are also member units of KCWA. The project gives first priority to groundwater districts to recharge the groundwater basin, and first priority to non-groundwater districts for recovery of their banked groundwater supplies. About 230,000 acre-feet has been banked since 1995.

One remaining issue to be resolved is the export of banked water out of Kern County for use by other interests who are not contractors with either the State Water Project or the Central Valley Project.

(Continued on next page) Another important factor in the continuing success of water banking is access to wet-year "high-flow" water. Improved conveyance across the Sacramento-San Joaquin Delta and increased offshore surface storage capacity is needed to augment the flexibility of water banking programs. This solution will only reach its full potential with a balanced CALFED Bay-Delta Program that provides improved water supplies and water project operational flexibility.

Unique project saves groundwater while pumping it

An innovative approach to solving San Bernardino's chronic high groundwater problem got underway when a pilot project was kicked off April 26.

High groundwater is historically a normal, but vexing, problem in the area. It poses potential structural problems as well as the risk of liquefaction during serious earthquakes.

A pilot dewatering project reduces dangerous groundwater levels in problem areas while continuing to replenish upstream agricultural areas with native, high-quality water.

The project will also, over time, improve the quality of groundwater in the lower, west end (in the general vicinity of Inland Center mall) because the pumping results in a "flushing", or cleaning, action.

Several wells were rehabilitated and a short run of pipeline was laid for the economical program. Water pumped is discharged into the Santa Ana River channel for further use downstream by other agencies and communities.

The project has been coordinated with the Regional Water Quality Control Board to ensure water introduced into the river meets all water quality standards. The water could also be sold to other agencies if they have a way to transport or "wheel" it.

The affected region in the southwestern part of San Bernardino is located in the Santa Ana River watershed. Early in the 20th Century, diversions and increased pumping helped control the problem.

However, water quality and increased demands of citrus growers upstream quickly became concerns. For the past 88 years, surface diversions and water from several creeks has been percolated back into the groundwater supplies to the east in order to support agriculture needs.

When the amount of water replenished exceeds the amount pumped in the citrus-growing region to the east, groundwater migrates west, joins underground water from other streams, and encounters the San Jacinto Fault which stops its flow. That causes groundwater to rise, in some cases even causing

artesian conditions at the surface.

Agencies involved in the project include the San Bernardino Valley Water Conservation District; S.B. Valley Municipal Water District; the cities of San Bernardino, Redlands, and Riverside; Gage Canal company; Riverside Highland Water Company; and Meeks and Daly Water Company. Other agencies are expected to join as the project continues.

Metering private wells is successful under AB 3030 management plan

(Fourth in a series on Eastern Municipal Water District's successful implementation of an AB 3030 groundwater management plan in western Riverside County.)

The state's first groundwater management plan structured under the provisions of AB 3030 became fact Jun. 8, 1995, when Eastern Municipal Water District's (EMWD) plan was adopted for a portion of the district's service area in western Riverside County.

An advisory committee was formed. Guidelines for the committee's operation were developed. Groundwater subbasins in the plan area were prioritized. Groundwater resources were evaluated.

And in the most sensitive step, groundwater monitoring programs were initiated. In many cases, this involved metering private wells.

Initially, water levels were monitored in 106 wells semi-annually and water quality was checked in 65 wells annually. The numbers have grown each year. EMWD pays all costs of well sampling, laboratory analysis, and of providing the well owner a copy of the results.

A voluntary extraction monitoring program was implemented in the Lakeview subbasin. This involved evaluation of wells, installation of production meters, reading of the meters, and estimation of groundwater production in non-metered wells.

To sweeten the pot, EMWD assisted well owners by providing information on groundwater rights and the importance of filing annual groundwater production recordation notices.

Owners of unmetered wells with significant annual production were provided permission forms to complete that would allow EMWD to evaluate their wells for possible inclusion in the program.

On suitable wells, meters have been installed, and they are read monthly by EMWD. They can be removed at any time upon written request of the owner.

The district also agreed not to interfere with well operations when metering or reading the meters.

Wells with existing meters also qualify for the program, and those meters are also read monthly by EMWD.

Production in non-metered wells is estimated based on acreage and crop, or, in the case of dairies, by the number of cattle. Estimation methods are constantly revised and refined by comparing against usage of metered wells.

At present, about 70% of the groundwater production in the nine-subbasin Plan area is metered. The advisory committee, comprised of representatives of all affected groups, has recommended expanding the extraction monitoring program throughout the AB 3030 Plan area.

Interested AGWA members may receive a copy of the program Annual Report or a sample of the Groundwater Monitoring Program Permission/ Participation Form upon request to the Resource Development Branch at EMWD, (909) 928-3777, ext. 4338.

Three groundwater industry figures are in the news

Three key individuals in the groundwater industry in southern California have been recognized

with special honors or appointed to new posts.

Mel Blevins, Upper Los Angeles River Area Watermaster for the L.A. Department of Water and Power, and an AGWA director, was picked to receive the 1999 Award of Distinction from his alma mater, the College of Engineering at San Jose State University.

A 1957 graduate, Blevins earned his M.S. in Civil Engineering from the University of Southern California in 1970.

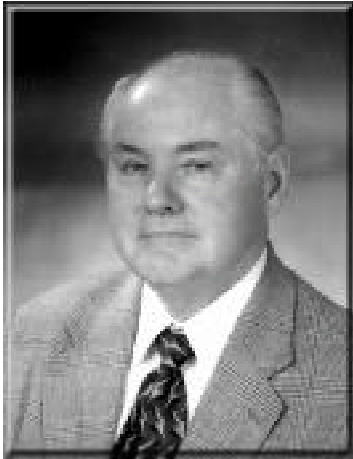
He joined LADWP in 1957 as a civil engineering assistant and stayed with the agency until his retirement in 1998, when he was a senior waterworks engineer in the water executive office and the aqueduct division. He was dealing with groundwater management problems.

Blevins was waist-deep in groundwater matters for 30 years at the Department. He headed groundwater and water rights studies in the San Fernando Valley, Mono Basin and Owens Valley.

In 1979, he was appointed Watermaster for the Upper Los Angeles River Area. He continues under contract in that role today.

A registered civil engineer and an active member of numerous engineering and water-related professional organizations, Blevins has taught classes for nearly 30 years at USC, UCLA, Loyola Marymount, UC Davis and CSU Fullerton.

Clayton A. Record, Jr., board vice president at Eastern Municipal Water District, has been appointed EMWD's director on the Metropolitan Water District board, effective June 1. He is also a director of AGWA. Record served two terms as a Riverside County supervisor from 1972 to 1980. He has chaired the



county's Growth Management Element Policy Advisory Committee, was a member of the Riverside County Commission on Reorganization and Structure and serves as a Foundation board member for the University of California, Riverside.

Long active in the water arena, he serves on the local government, state legislative and groundwater management committees of the Association of California Water Agencies. He is a graduate of Cal Poly, San Luis Obispo with a degree in dairy husbandry.

John W. Norman

was appointed general manager of Mojave Water Agency effective May 26. He has more than 20 years of experience in engineering, construction, business administration and water resources management.

His record of affiliations includes the Water Replenishment District of Southern California, Midway City Sanitary District in Orange County and Bechtel Corporation, an international engineering and construction firm.

Mojave Water Agency is headquartered in Apple Valley and covers nearly 5,000 square miles of high desert in San Bernardino County. It is responsible for managing groundwater for nearly 400,000 residents within its boundaries.

