DRINKING WATER ISSUES:
Tests find chemicals at reservoirs; REGION'S WATER CALLED SAFE, BUT CRITICS CALL FOR MORE RESEARCH
San Jose Mercury News – 3/18/08
By Paul Rogers, staff writer

Water from San Francisco Bay's delta and from at least two Santa Clara County reservoirs contains trace amounts of pharmaceutical compounds, including ibuprofen, hormones found in birth control pills and a drug used to reduce cholesterol.

The Santa Clara Valley Water District released the information Monday in response to a request by the Mercury News. But the results raise more questions than they answer, including whether the chemicals pose any health risk at such low levels or whether they ever reached household taps.

The chemicals were discovered in 2002 and 2003 during the district's tests of water that had not yet been treated at the district's three treatment plants in San Jose.

The agency tested for 14 pharmaceutical and endocrine-disrupting chemicals, and eight were found in detectable levels. All the readings were very low, with none reaching above 1 part per billion.

Officials at the district, a San Jose agency that provides drinking water to 1.8 million people in Santa Clara County, said Monday that the region's water is safe to drink. Studies conducted around the world have not documented a human health impact from trace levels of pharmaceuticals in water, they said.

"Just because you can find something doesn't mean it is harmful," said Bruce Cabral, water quality manager for the district.

Officials believe the chemicals came from cities like Sacramento and Stockton, whose treated wastewater empties to the delta. When people take prescription and over-the-counter drugs, some of the drugs are absorbed in their bodies and some pass through into their toilets. Most sewage treatment plants do not have the technology to filter out all such chemicals at minute levels, and they are discharged into rivers, oceans and bays in treated wastewater.

The district took the tests - which cost $100,000 - to obtain background data on delta water so it could be compared to water from a proposed recycled water plant the district is considering building, Cabral said. The district did not test the "finished water" coming out of its treatment plants. Those plants, two of which have state-of-the-art ozone treatment systems, would be expected to reduce the levels, although probably not eliminate them entirely.

The chemicals detected in water from the delta and Lexington and Calero reservoirs included ibuprofen and naproxen, found in Advil and Alleve; gemfibrozil, a cholesterol

drug; the hormones estrone and 17B-estradiol; and nonylphenols, a chemical used in detergents, pesticides and contraceptives. Tests for other compounds, including testosterone and anti-convulsants, were negative.

Cabral said the district has no plans to do further tests, but is working on a project with the Contra Costa Water District to figure out ways to better filter delta water.

The Mercury News made the request for the data after the Associated Press reported last week that pharmaceuticals have been found in trace levels in the drinking water systems of 24 of America's largest cities.

Philadelphia had the most, with 56 types found.

The AP found many water systems don't test for pharmaceuticals. Because such compounds in low levels have not been clearly linked to human health problems, there are no federal health standards for them in drinking water.

U.S. Sen. Barbara Boxer, D-Calif.said last week she plans to hold hearings in April on the issue.

Environmentalists said the findings highlight a need for more research and for new standards from the U.S. Environmental Protection Agency.

"Utilities tell us not to worry, that the levels of contaminants they're finding are too low to cause harm," said Bill Walker, a spokesman for the Environmental Working Group in Oakland.

"But the truth is that the health effects of this chemical and drug cocktail in our drinking water haven't been studied, leaving us concerned about the risk to infants and others who are most vulnerable."

A top Stanford water researcher said more study is needed.

"Historically we have thought a lot about industrial chemicals - DDT and that kind of stuff - but now we are finding chemicals that you and I buy in the checkout line at Safeway," said Richard Luthy, chair of Stanford University's Department of Civil and Environmental Engineering. "They are widely used. But we don't know what the effects are."' #
http://www.mercurynews.com/localnewsheadlines/ci_8609713

DESALINATION:
Pilot desal plant up and pumping in Santa Cruz
Santa Cruz Sentinel – 3/21/08
By Shanna McCord, staff writer

SANTA CRUZ -- The first step down the long road to securing the area's future water supply was taken Thursday as a temporary test desalination plant on the Westside was switched on.

The $4 million pilot plant, to run for at least a year at the Seymour Center's Long Marine Lab, is expected to set the stage for a permanent desalination facility in Santa Cruz around 2015.

"The major goal of this project for Santa Cruz is to deal with our problem of not having enough water in drought conditions," Councilman Mike Rotkin said during the plant's grand opening. "This is our best hope."

The desalination project is a team effort by the city Water Department and Soquel Creek Water District, the two water agencies that provide the bulk of drinking water to homes and businesses from Davenport to Aptos.

Soquel Creek is plagued with overused wells threatened by saltwater intrusion, while Santa Cruz, which relies on surface water, is caught in a bind during the dry periods that have occurred every six or seven years.

Customers are already diligent about limiting their water use on a daily basis, making it difficult for the agencies to save more water through further conservation, officials said.

Both agencies believe turning ocean water into drinking water through energy-intensive reverse osmosis will solve their shortage problems.

"We use more out of the ground than the amount of rainfall each year," Bruce Daniels of the Soquel Creek Water District said. "The imperative is clear. If we don't do this, we'll have a disaster."

However, a series of extensive tests are required by the state Health Department before a permanent desalination plant can be considered.

Every desalination plant in the state is required to perform tests because of the unique characteristics of the ocean in each area.

A $2 million grant from the state Department of Water Resources helped pay for the pilot plant. The other half was shared between the two water agencies.

Paul Meyerhofer of the Walnut Creek engineering firm Camp, Dresser and McKee Thursday led a tour of the pilot plant, which will pump about 72,000 gallons of fresh water each day. The water, not for consumption, will be pumped back into the ocean.

Meyerhofer explained the various filters and membranes used to desalinate the water, describing how seashells and other floating debris will be taken out.

"We're trying to determine if desalination is a feasible technology for Santa Cruz," he said. "We want to do this with the lowest energy usage, lowest cost and least environmental impact."

The proposed permanent desalination facility, with a price tag of at least $40 million, would have the capacity to produce 2.5 million gallons a day. The Soquel district would use about 1 million a day.

While use of the desalination plant would be restricted to only drought times in Santa Cruz, the city also faces an abrupt end to its ability to supply water to new customers by 2015 in normal rainfall years.

With normal rainfall and incremental growth in the next seven years, Santa Cruz faces an annual shortage of 31 million gallons unless a new source is tapped, Water Director Bill Kocher said.

Expanding the desalination plant to accommodate future growth and demand would be a possibility, though not something anyone is talking about today.

"I don't want to link this desalination plant with growth," Kocher said. "But there's going to be a day we could say to people, 'No new connections'." #
http://www.santacruzsentinel.com/ci_8648018

Crooked Pipes

Written by Chris J. Magyar

Wednesday, 19 March 2008

FLOW prepares for the final battle against RWE for control of Felton's water utility

How much is water worth? A California American Water (CalAm) internal memo—prepared by a PR firm in 2003 and leaked to activists and the press anonymously—states the following about the prospects of quashing eminent domain mutiny in Felton: "The results of [focus groups] show a grim environment in which the only viable argument appears to be increased taxpayer cost without improvements to service or water quality."

The resulting two years saw the 2003 memo serve as a playbook for the company in its efforts to prevent Felton Friends of Locally Owned Water (FLOW) from placing Measure W on the ballot and getting the necessary votes for the $11 million bond issue to pass. Those efforts fell short; the bond passed, and FLOW has successfully opened an eminent domain case in Santa Cruz County against CalAm, which is a division of American Water, itself a branch of the German company RWE.

CalAm contested the FLOW lawsuit, forcing a court case to determine the amount of compelling public interest necessary for a legally mandated takeover. Jim Mosher, a lawyer with the Pacific Research Institute who has represented FLOW pro bono throughout the five-year ordeal, says the case was not looking good for CalAm. "It was odd that as we neared the trial, they didn't seem to be preparing," he says. "They even announced another 67 percent rate increase, which would further skew the difference between what we paid under them versus public ownership, a substantial part of our case. We had a mountain of evidence of their mishandling the watershed, lack of attention to conservation and environmental protection, and poor service."

All this is in the past tense because, on March 10, one week before the hearings were scheduled to begin, CalAm withdrew its opposition and asked Judge Paul Burdick to move the case directly to the jury phase, in which a panel of Santa Cruz citizens will determine the price of the system. That case will begin in June.

"They never intended to go to trial in the first place," asserts Jim Graham, FLOW's spokesperson. "It was just a tactic to make us do tons of research and spend tens of thousands of dollars. They have proven they'll do anything to drive up the price of our acquisition."

CalAm's statement in the wake of its change of heart is, basically, that it thinks the district is worth $25 million, the citizens don't have that much money, and so the eminent domain case will be dismissed for lack of a buyer. "Without question, there are serious issues with the District meeting the 'more necessary public use' standard under the law," says Joe Conner, CalAm's trial lawyer. "However, after reviewing the District's appraisals and taking depositions of the District's witnesses, we don't believe the District will be willing to pay for the system. That will show that eminent domain is not in the best interest of the public."

Mosher says this is a fool's bet. "I believe their legal tactic is to get the jury confused with all the technical evaluations of the system from both sides, and hope they'll come up with a number halfway between their $25 million and our $7 million." The assessment FLOW is working with stems from work the county did in advance of Measure W, to assure that the $11 million being raised would be sufficient for purchasing the system. "But I don't think a Santa Cruz jury will go for that," Mosher continues. "I think they'll see through what CalAm is trying to do."

The valuation of a water system is tricky, and can be calculated by many different methods. FLOW currently maintains that American Water's private purchase of the utility cost about $3 million, though it's hard to pinpoint since Felton's system was just part of a much larger purchase that wasn't broken down piece by piece. Because the system has always been privately owned, there are no publicly available figures for its value through the years.

Barbara Sprenger, FLOW coordinator and candidate for State Assembly, says the group's numbers reflect market rates. "Most systems sell for around $2,500 per hookup," she says. "We looked at another system that sold for $6,700 per hookup, because it was a tremendous outlier due to a lot of property that could be sold off. Then we went above that to $8,200 per hookup for ours, just to be extra safe." There are approximately 1,300 hookups in the Felton water system. CalAm's estimate of $25 million would equate to $19,230 per hookup.

"When you're valuing something that's a business," says Sprenger, "it's basically worth what you can make out of it." She estimates that CalAm takes in $1 million a year, and with an 11 percent profit guaranteed by the California Public Utilities Commission (PUC), that equals $110,000 annually.

Conner says the company retained a team of experts, including local real estate and timber appraisers who know the area well, in order to arrive at its valuation. "What we've done is apply

standard accepted uniform appraisal practices," Conner says. "This is a system that is well run and well operated with dedicated employees. It has 250 acres of watershed property and timber. We believe it's worth $25 million."

Part of that valuation is the treatment plant CalAm installed after taking over, which makes up a large part of the water system's replacement value. FLOW argues that residents already paid for that system in rate hikes, and shouldn't have to buy it again. "We're saying you can't charge us again for that," says Graham, "and they say they can."

The irony of the entire case is that RWE, the German parent company, wants to sell its CalAm holding (indeed its entire water interest in America), and even sought to issue an IPO in 2006 when no private buyers were found. As a utility, the IPO had to be cleared through the PUC, which entailed filing a statement with the Division of Ratepayer Advocates (DRA). RWE stated that it was merely divesting its American holdings in order to concentrate on the dynamic European energy market.

The DRA had a scathing reply, poking holes in RWE's rationale. The findings were so incisive, in fact, that a judge allowed the public report of the findings to be partially redacted by RWE to protect its interests. However, the technology used to black out the redacted passages was flimsy, and a clean version of the PDF accidentally appeared for a time. It is in this clean version that the true motivation for RWE's need to sell emerges.

According to the DRA, minutes from an RWE board meeting show that the German company was taken aback at the difficulties of turning a profit in the American water market, and that its initial estimates of efficiencies and rate increases were overly optimistic. The American Water system turned out to be full of leaks, and would need a new management team to perform up to code, much less with improved efficiency. "In an effort to avoid its commitment to invest in the system and risk a lower investment in the energy business," the report states, "RWE determined it should cut its losses and divest itself of American Water."

Conner says the decision of RWE to divest has no bearing on American Water's willingness to sell off its constituent parts. "We are owners and operators, not sellers," he says. "We take great pride in the way it operates, and the fact is that we're not in the business to improve a system or develop a system simply to sell it. I've worked with American Water for almost 10 years, and the way they operate today is very similar to when I came in before RWE's ownership."

The DRA report indicates that RWE is aware of the entire system being somewhat less valuable than it anticipated. “Based on the minutes,” the report states, “water lost through leakage increased from 15 percent to 18 percent in New Jersey, and was as high as 30 percent in Pennsylvania. Replacing American Water’s pipe system based on the current renewal rates would take 200 years. In addition, American Water has not met regulatory stipulations in various U.S. states for a period of several years due in part to American Water’s insufficient investment in the 10 years prior to RWE’s acquisition.” So, for Felton’s very small system to have increased in value from $3 million to $25 million in five years, one would expect it to be an exception to this rule, with fantastic profit margins and a gleaming, well-maintained system.

It’s entirely possible to take a wrong turn while hiking near Henry Cowell Redwoods State Park and accidentally get lost on the unfenced property between CalAm’s Bull Creek dam and its water tank on Orchard Road. Along that stretch of creek, as one desperately searches for a way back to the road, the pipeline floats through the culvert, tied to various rotting rail ties and, at one point, an ancient tree trunk, with lengths of chain. Metal alternates with blue plastic piping in areas where repairs have been made. A valve near the dam gushes water. To the untrained eye, the Rube Goldberg entwinement of pipes and moss and rot seems less than ideal, but perhaps this is just the nature of running a water system through geography as untamed as the western slope of the Santa Cruz Mountains.

Speaking about the state of maintenance in Felton, Conner says, “I think the best thing I could tell you is out of the district’s own words: they have not alleged any problem with the maintenance or service components of the Felton system in the lawsuit. I specifically asked them that question. They know of no problems with the work being done on the ground by the employees. Their issue is simply wanting to take over the system.”

Mosher thinks the trial won’t drag on now that it’s in its final phase. He’s also confident that the system will be affordable. “My understanding is that the water district will be able to get occupancy of the sale within weeks of the verdict,” he says, “and any appeal would be on a very narrow basis, on a matter of law, not fact. We will get a dollar amount. The point we put it down, it’s over.”