

Public Meeting on Surface Water and Fluoridation

Sacramento Suburban Water District (SSWD) hosted a special meeting for its South Service Area customers to learn more about the addition of treated surface water and optimally fluoridated water. District staff and technical experts were present providing information and answering questions. Below are a summary of the presentation and a synopsis of the meeting's questions and answers.

Presentation Summary

SSWD has taken a proactive approach to ensuring an adequate water supply for customers. SSWD currently draws water from groundwater basins. To reduce overdrafting of its groundwater supply, SSWD adopted a diversified approach known as conjunctive use (see Q&A below for definition) that allows the groundwater basin to recharge by using surface waters when available, enhancing the reliability of the water supply.

Today, after years of long-range water supply planning, SSWD is preparing to provide customers in the South Service Area (SSA) with supplemental surface water. SSWD entered into an agreement with the City of Sacramento to acquire up to 20 million gallons per day of treated surface water from the American River. This new water source is scheduled to begin supplementing existing SSWD groundwater supplies in the SSA in November 2006.

Surface water received from the City of Sacramento is fluoridated in accordance with California Department of Health Services (DHS) standards. To maintain an optimal fluoride level in its total water supply, meet DHS standards and provide the greatest health benefit for the prevention of tooth decay, SSWD will be adding fluoride to its groundwater supply in the SSA.

Questions and Answers Synopsis

In addition to SSWD staff, the health and technical experts answering questions from the public were:

Mr. Dave Lancaster, Engineer, California Department of Health Services
Dr. David Nelson, Fluoridation Consultant, California Department of Health Services
Dr. John Orsi, Dentist
Dr. Glennah Trochet, Public Health Officer, County of Sacramento
Dr. Dennis Wong, Dentist

1. What is conjunctive use?

Conjunctive use combines the use of treated surface water in wet years, when ample water is available from rainfall and snow pack, with the use of groundwater in dry years, when surface water isn't as readily available. This diversified approach reduces the total draw on the groundwater basin, allowing it to recharge. This enhances the reliability of the water supply, while allowing increased river flows during dry years. Conjunctive use is a process implemented to reduce the dependence on local groundwater basins and prevent depletion of the groundwater supply.

2. Did SSWD have an alternative to purchasing treated surface water from the City to do conjunctive use?

At the very beginning of the process, the water district was planning on building its own water treatment plant. However, the City of Sacramento decided to expand capacity at its Fairbarn water treatment plant and SSWD had an opportunity to buy into the plant expansion. The decision to purchase into the plant expansion made it significantly more cost effective to secure the surface water than if the District built its own plant. At the time the decision was made, the City of Sacramento did not fluoridate its water. Since then, the City, under Assembly Bill 733, began optimally fluoridating its water. At this point, it is much more cost effective to purchase the water from the City and fluoridate SSWD groundwater than it is to build a new water treatment plant.

3. With more money from customers (higher rates), would SSWD have built its own water treatment plant and not purchased water from the City?

Purchasing water from the City of Sacramento is more than a strictly financial decision. In the early 1990's, a number of agencies, including SSWD, joined together to create the Water Forum Agreement. This Agreement outlines directives to ensure a safe and secure water supply through 2030 while protecting the lower American River. It took seven years to gain consensus between all the groups involved. Part of that agreement involved conjunctive use and securing a dual water supply, which is what SSWD is accomplishing with this project.

4. If SSWD had built its own plant, would we still need to have fluoridated water now?

According to the State DHS, yes, SSWD's water would still need to be fluoridated. Due to the District's number of connections, it falls under Assembly Bill 733, which mandates the optimal water fluoridation if funds are made available. The First 5 Sacramento Commission, seeing the health benefits of optimally fluoridated water, granted SSWD the necessary funds. Since the funds are available, SSWD must fluoridate its water. First 5 Sacramento Commission awarded SSWD \$2.1 million for capital facilities (for installation of fluoridation equipment on wells in the SSA).

5. Who is the First 5 Commission?

The First 5 Sacramento Commission works to improve the lives of the county's youngest children and their families through an effective, coordinated, and inclusive implementation of the California Children and Families Act, also known as Proposition 10, which was enacted in 1998. The ultimate goal is to enhance the health and early growth experiences of children, enabling them to be more successful in school and to give them a better opportunity to succeed in life.

6. Who makes the decision on who receives First 5 monies?

First 5 receives funds generated by a State tax on tobacco products. The funds generated are used to enhance the health of California children between of 0-5 years of age and their families. Decisions on the appropriation of monies are made by local commissions, such as the First 5 Sacramento Commission, made up of County Supervisors, County Health Officers and other health professionals.

7. How much does it cost to fluoridate the water?

Operations and maintenance costs range from \$200,000 to \$300,000 per year in the South Service Area. The exact cost will vary within that range depending on the amount of water purchased. If it's a wet year, more water will be purchased from the City, but less money will be spent fluoridating groundwater, since less groundwater will be used. In a dry year, SSWD will spend less purchasing water, but more money will be spent fluoridating the groundwater supply.

8. What will be the concentration of fluoride in the water?

SSWD will adjust the concentration of fluoride in the water to meet the optimal fluoridation levels outlined by the State of California DHS. Optimal levels of fluoride in the water supply are between 0.7 and 1.2 parts per million.

9. How often will the water be tested to determine its fluoride concentration?

Operational tests will be conducted on a daily basis. SSWD is currently in the process of amending its water supply permit, which determines the frequency at which water samples need to be sent to the State's lab for additional tests. Once the permit is granted, the frequency of these additional tests will be known.

10. How can SSWD ensure that water is optimally fluoridated throughout the South Service Area?

SSWD will be optimally fluoridating its groundwater sources at the same concentration as the water purchased from the City. When those two water supplies are integrated, fluoride levels will remain at the same concentration, regardless of how much water is used from one source versus the other. Therefore, the level of fluoride in the water will be consistent throughout the whole South Service Area, regardless of a consumer's distance from the water source or the ratio of surface water to groundwater. SSWD will test the water regularly to ensure optimal fluoridation.

11. Some studies have suggested that fluoride may have detrimental effects. Is this of concern with water fluoridation?

Fluoride at very high concentrations can be dangerous. The amount of fluoride used in optimally fluoridated water is very low. The preponderance of scientific studies show that, at these optimal levels, fluoride provides important health benefits without any of the detrimental effects. When looking through studies or other information about fluoridation, it is imperative to note the source of the data and rely upon established sources, such as the Centers for Disease Control, American Medical Association or American Dental Association.

12. Fluoride seems to only benefit children. Why put fluoride in the water instead of just providing fluoride supplements to kids?

While it is true that fluoridated water has been proven to be the most effective measure to prevent tooth decay in small children, its benefits go beyond the youngest members of the population. In the senior population, for example, fluoridated water cuts root decay by 60%, compared to 20-30% in children. Fluoride helps people of all ages, from toddlers to senior citizens. Areas with fluoridated water report fewer dental problems and lower dental costs than areas without fluoridated water.