

# CONNECTIONS

## *Recycled Water Project Update*

Redwood City Recycled Water Project

Spring 2009

### **Drought Watch: Doing More with Less**

#### **Late Season Rains Do Little to Ease Statewide Drought**

A wet February and damp March did little to ease drought concerns throughout the state and Redwood City remains short of its normal rainfall. Despite the late season storms the city has received lower than its average amount of precipitation for this time of year.

The Redwood City Recycled Water Project, however, continues to provide its customers with a drought-proof source of water. The statewide drought reinforces the importance of recycled water in meeting the city's water needs.

City officials continue to monitor the water supply situation and encourage residents and businesses to conserve water at every opportunity. Cities and counties throughout the state have implemented water rationing, particularly those areas served

by state and federal water projects.

Redwood City is in a slightly better situation, because it receives all of its drinking water from the Hetch Hetchy water system, which is operated by the San Francisco Public Utilities Commission (SFPUC). The Hetch Hetchy system collects water from the Tuolumne River watershed, storing rainfall and snowmelt in a system of reservoirs in the Sierra Nevada and in local watersheds. Precipitation in the Tuolumne watershed has been just under normal, while the SFPUC's Bay Area watersheds have received 76 percent of normal rainfall.

#### **Voluntary 10 Percent Conservation Goal**

In order to maintain reserves in the system's reservoirs in the event of a fourth year of drought, SFPUC officials are encouraging voluntary conservation of 10 percent on the part of the 2.5 million residents who receive water from the system.

### **Independent Study of Recycled Water Use**

During the summer of 2008, Redwood City requested an independent evaluation of the use of recycled water in Redwood Shores. The City hired HortScience, Inc. of Pleasanton to conduct the study. HortScience used Kelley & Assoc. Environmental Sciences and Dr. Larry Costello from University of California Cooperative Extension to complete the study. HortScience provides horticultural consulting and soil and plant analyses while Kelley & Assoc. provides consultation in environmental and arboricultural sciences. Dr. Larry Costello provided review and comments.

Some of the initial results of the evaluation include:

- Recycled water is successfully used when managed appropriately. Appropriate management may vary at specific sites and may require adjustments, including an evaluation of existing soil conditions, the effects of salinity on plant life and monitoring those effects.
- Some adjustment to the recommended water irrigation volumes may be necessary at certain sites, particularly those with higher salinity volumes in the soil. Applying additional water maintains a better salinity balance in root zones.

### **Final Section of Seaport Pipeline Work Under Way**



involve attaching pipeline to the east side of the Hwy 101 bridge over Redwood Creek. Work on the Hwy 101 embankment will require a single lane closure on northbound Highway 101 this work will take place between 9:00 PM and 5:00 AM.

Residents in the area may be affected by construction noise during the permitted hours of night work. Trenching and

the final section of pipeline construction in the Seaport area is under way. Pipeline trenching and installation started at East Bayshore Road and Bair Island Road and will head south alongside Hwy 101. Work will continue through September.

The most difficult section of work will

pipeline installation will proceed south to the Maple Street overpass and tie in to the existing pipeline on Maple near Blomquist. Daytime construction hours will be from 7:30 AM to 4:30 PM for the Maple St. and East Bayshore segments. Please contact our offices if you have any questions about these activities at (650) 743-5759.

The City's Recycled Water Project Team is now reviewing the study's findings and recommendations. Salinity mitigation measures are constantly being developed, reviewed, and measured throughout the state. Redwood City will stay abreast of the latest practices and will work with recycled water customers to implement them where necessary.

Once the final HortScience report is completed and reviewed, it will be available to the public. Anyone interested in obtaining a copy of the report should contact Courtney Rubin at (650) 780-5733.

## Project Team Member Spotlight:

### Donald "Nick" Nickle, Water Utility Specialist



It is rare to find a person who has found their true calling in life. Rarer still is to find that person working in a recycled water plant. But Donald Nickle is not your average utility

worker. Nickle, known to his colleagues as "Nick," has been a member of the Recycled Water Project Team since its inception. He is in charge of monitoring and maintaining the pumps and control valves at the pumping station that sends recycled water to customers throughout the Recycled Water Project in Redwood City.

His job title is "Water Utility Specialist," but a more accurate job description for the affable Nickle might be "problem solver." Add to that caretaker, mechanic and watchdog and you start to understand his passion for his role in providing customers with recycled water. Nick has worked for Redwood City for 15 years. He started out in the Street Department because of his experience in the paving industry. He had a chance to work in the Water Department, where he has been for the past 10 years. "I was fascinated by it," said Nickle. "I was always curious, always asking a lot of questions. I probably bugged a lot of people with all those questions."

He started as a laborer in the Water Dept., worked his way up to foreman and became a utility specialist. During that time he's received special training and has continued to learn on the job. "I really blossomed as a person when they asked me to transfer over to the Water Dept.,"

said Nickle. "I learned things about myself — that I am an intelligent and competent person. I always admired my dad because of his mechanical ability. I thought I didn't have that in me. But he said to me early on, you're better than that ... I don't want to say anything bad about paving, but I felt I was using my back and not my mind. But in this work, I have found myself." What he also found was the mechanical aptitude of his father. "I discovered I had those abilities, too," he said. "It's very rewarding to me. I feel like I have arrived as a man. Found my true calling."

When the recycled water plant was in its start-up phase, Nickle responded to the late night alarms. "There were many sleepless nights that first year working out all the bugs and other problems. When everybody else was asleep at night, I was making it run because that's when everyone is using water for irrigation."

The amount of training and information "really is vast and I am still amazed that I have learned as much as I have," he said. "It was all part of growing up with this plant." He is also part of a project that has regional benefits. "We're saving 50 million gallons of potable water and it is water that is saved for Redwood City, but also water that other people can benefit from. And we send less treated wastewater into the bay, and that is a good thing."

His years of working with water have deepened his appreciation for its value. "Water is the key to life," said Nickle. "When they send the space mission to Mars they're not looking for signs of government. They're looking for water."

## Training Slated on Safe Use of Recycled Water

The next Site Supervisor training will be held June 4. This training is open to all irrigation and non-irrigation maintenance workers and facility managers currently connected or soon-to-be connected to the Redwood City Recycled Water system. Topics will include cross connection control protection, recycled water quality and production, customer guidelines for irrigation and non-irrigation use of recycled water and best management practices for landscaping.

New to the training will be an update on the project, conservation rebates available for potable water and an opportunity to tour the recycled water production plant at South Bayside System Authority (SBSA) on Radio Road.

More information will be available in May. If you have questions, please call the project office at (650) 780-5730 or email Courtney Rubin, Recycled Water Specialist at [crubin@redwoodcity.org](mailto:crubin@redwoodcity.org).

## Why Water Rate Increases are Needed

In these difficult economic times, City officials know that raising water rates is not an easy decision. Over the past several years, Redwood City staff and elected officials have provided the community with the details and background information about the need for water rate increases in the foreseeable future.

On June 1, the Redwood City Council will consider water rate revisions that will increase residential water bills by \$2.43 per month per 15 units of water use. Rate increases are required for providing the safest and most reliable service possible to the community.

The cost of recycled water will rise as well, but will continue to be just 25 percent less than the cost of potable water for our irrigation customers and 40 percent less than the cost of potable water for our industrial users.

Increases in wholesale water rates are expected for the next 7 years to finance the \$4.3-billion restoration of the aging Hetch Hetchy water system, which is owned and operated by the San Francisco Public Utilities Commission (SFPUC). It is estimated that wholesale water rates will increase 7-21 percent annually between now and 2014 to pay the capital costs of the massive Hetch Hetchy project.

In order to reduce the "price shock" to customers, Redwood City has implemented consistent annual rate increases to spread out the large SFPUC increases more evenly. As a result, customers have seen average annual increases of about 8 percent over the last few years, instead of much higher periodic rate increases.



Project Information Resources:  
(650) 743-5759

[SeaportUpdate@DataInstincts.com](mailto:SeaportUpdate@DataInstincts.com)  
[www.RedwoodCity.org/RecycledWater](http://www.RedwoodCity.org/RecycledWater)