

Water Ways

It's Not Just An Energy Problem

Water customers will need to limit water use during rolling blackouts

State energy officials are warning of continued and more frequent rolling blackouts as residents and businesses begin using fans and air conditioning units in the coming months.

Rolling blackouts could limit Carmichael Water District's ability to produce its normal water supply this summer. Treatment of the district's water, and its delivery to customers, is powered by electricity. When a rolling blackout hits, the district must rely on back-up generators and natural gas engines to pump water during the outage.

The district's back-up systems can produce approximately 50 percent of the water used by customers on a normal summer day and are designed to be used in an emergency until electricity can be restored. If rolling blackouts are continued for extended periods, the district may be faced with limited energy supplies to provide water to its customers.

What the District is Doing to Prepare for Rolling Blackouts...

The new water treatment plant and the Dewey Drive pump station have newly installed back-up generators to supply power in the event of an emergency. Natural gas engines are located at two other district pumping facilities. The district also has storage reservoirs that hold six-million gallons of water for use during an emergency. The district



is working closely with other water providers in the region to maximize supplies of stored water and explore the potential for the shared use of back-up generators.

What You Can Do ...

The single most important action you can take during a rolling blackout is to turn off all water outside your home or business.

Well over 50 percent of water use occurs outdoors. During a power outage, increased demand on water supplies for outdoor use may jeopardize water and energy supplies for more critical indoor uses such as food preparation, showering and toilet use. During a blackout, customers should:

- **Turn off all water outside if a blackout hits your home or business.**
- Limit indoor water use to that which is necessary for health and safety reasons.
- Reprogram sprinkler timers after a power outage.

When Using Water Outdoors, Always Follow These Water Conservation Tips:

- Periodically check and replace the battery in your automatic sprinklers, if appropriate.
- Follow the odd/even summer watering schedule.
- Use a broom or rake instead of hosing down the driveway or sidewalk to remove grass and clutter.
- Use an automatic shut-off nozzle while washing your car to prevent water from running continuously.
- Adjust your sprinkler heads to water your lawn, not the sidewalk or house.
- Use a drip irrigation system to prevent runoff by applying water directly to the plant's root zone.



Midnight-10am

RECOMMENDED WATERING HOURS

Carmichael Water District is joining with SMUD and over 20 other water providers from the Sacramento Area Water Works Association (SAWWA) to ask the public to help reduce energy use by using less water during peak energy demand hours. Water outdoors between 12 midnight and 10 a.m. when energy demands are lowest.



MICROTUNNEL PROJECT INSPECTION

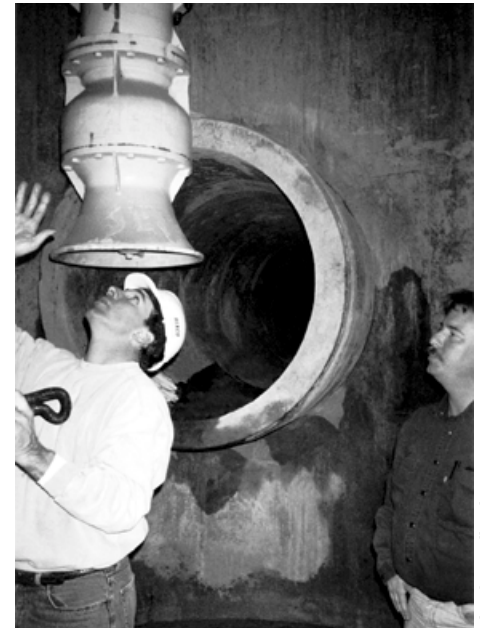


Photo by LaNell Little

Scott Boettcher, Montgomery Watson Project Engineer, and Steve Nugent, Assistant Manager for Carmichael Water District, inspect microtunneling work that will allow water from the south side of the American River to be piped to the new treatment plant on the north side.



The architectural style of the new treatment plant is now evident. Crews still need to paint, install flooring and landscape the grounds to complete the “residential” look of the new building.

New Water Treatment Plant Nears Completion

Construction on Carmichael Water District’s new micro-filtration water treatment plant project is nearly complete. Customers will begin receiving water from the new facility in May . Since the last “Water Ways” newsletter, the membrane filters have been installed, the interior of the

building and the roof have been constructed and all testing of the plant’s major components has been completed. Some work on the project site, including landscaping and paving, will continue into the summer months.

The treatment plant’s official grand opening is scheduled for September.



AMERICAN RIVER – BACK TO ITS NATURAL STATE

As a result of the new treatment plant and its modern engineering, tower structures of the Ranney collectors located across the American River have been removed. The riverbank is being restored to its natural landscape through re-grading and re-landscaping, and the electrical vault and power poles owned by Carmichael Water District will be removed this summer.



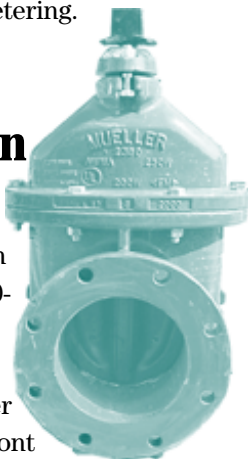
Regional Water Authority
BUILDING ALLIANCES IN NORTHERN CALIFORNIA

Carmichael Water District Joins Regional Water Authority

After over two years of planning workshops, dozens of committee and subcommittee meetings and numerous presentations to water agencies, a new regional water organization will begin operation as the Regional Water Authority (RWA) in June. With consensus from over 20 water providers and half a dozen different regional water associations and organizations in the region, RWA was formed to represent the unified interests of all members. RWA will provide more cost effective water efficiency programs, shared resources and expertise in meeting new federal, state and regional conservation goals including water metering.

Pipeline Installation Complete

The installation of over 14,000 feet of new water lines along Marshall Avenue, Sutter Avenue and Bajamont Way is finished. The new lines will deliver treated water from the new treatment plant and improve water pressure to some district customers. District residents may still see crews in the area repaving the roadways and conducting clean-up activities.



District Office Moving

After 85 years of service, Carmichael Water District will be consolidating its maintenance and administrative functions at one location. Renovation of an existing building at 7837 Fair Oaks Boulevard is in progress. Administrative personnel will be moving to the new district office location in June. The district's water distribution and maintenance functions were moved to 7837 Fair Oaks Boulevard two years ago.



CWD to Participate in 2001 Folsom Lake Pumpout

The city of Sacramento has invited Carmichael Water District to participate in the 2001 Folsom Lake Pumpout and Restroom Public Education Campaign. The campaign is designed to encourage boaters, particularly overnight ones, to use the pumpouts for wastewater disposal instead of dumping waste directly into Folsom Lake. Information cards, a pumpout flag, a customer survey, raffle prizes and other items will promote the project. The Arden Cordova Water Service, the cities of Folsom and Roseville and San Juan Water District will also be participating.



Budget and Rate Hearing Scheduled for June 4

Carmichael Water District's annual budget public hearing will be held Monday, June 4 at 7 p.m. at the La Sierra Community Center. Information about the district's water rate schedule and the 2001-02 budget will be presented. The public is encouraged to attend.



District Employee Willis (Wiley) Johnston Passes Away

Staff member Wiley Johnston passed away on March 7. Wiley had worked at Carmichael Water District for 11 years as a senior pump operator in the water production department. District staff and board members are mourning the loss of their colleague and friend.

C A R M I C H A E L W A T E R D I S T R I C T

2000 CONSUMER CONFIDENCE REPORT

Constituent	Source	MCL Highest level allowed by law	Carmichael Groundwater		Citrus Heights Groundwater		Fair Oaks Groundwater		PHG (or MCLG) Public Health Goal
			Range	Average	Range	Average	Range	Average	
Primary Drinking Water Standards									
Turbidity (ntu)	Suspended matter present in water that creates cloudiness.	0.5	0.10-.85	.42	N/A	N/A	N/A	N/A	NE
Total Trihalomethanes (µg/l)	Compounds that form when chlorine added to the water reacts with natural organic substances.	100	10.5	1.0	ND	N/A	ND	N/A	NE
Lead (µg/l)	Internal corrosion of household plumbing systems; erosion of natural deposits.	15 ¹	ND-7	2	ND	N/A	ND	N/A	2
Nitrate (mg/l)	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.	45	ND	N/A	3.9-11	7.5	ND-31	5.5	45
Arsenic (mg/l)	Erosion of natural deposits.	50	ND	N/A	ND-3	1.5	ND	N/A	NE
Radon (Pci/L)	Naturally occurring in most soils.	NE	ND	N/A	206-263	235	130-884	450	NE
Nickel (µg/l)	Erosion of natural deposits.	100	ND	N/A	ND-14	7	ND	N/A	NE
Gross Alpha (Pci/L)	Decay of natural and manmade deposits.	15	ND	N/A	.76 –1.22	.99	ND	N/A	0
Secondary Drinking Water Standards									
Hardness as CaCO ₃ (mg/l)		none	ND	N/A	86-150	64	51-180	129	none
Manganese (µg/l)	Erosion of natural deposits.	50	ND-50	6.40	ND	N/A	ND	N/A	50
Sodium (mg/l)		none	ND	N/A	12-31	19	5.1-19	13.9	none

¹ Lead and copper are regulated by an action level instead of a maximum contaminant level.

Key to Abbreviations

N/A	Not applicable
ND	Not detected
NE	None established
NTU	Nephelometric Turbidity Units, a measure of clarity
Pci/L	Picocuries per liter
<	Less than
µg/l	Micrograms per liter
mg/l	Milligrams per liter

Water Quality Definitions

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk

to health. MCLGs are set by the U.S. Environmental Protection Agency.

Public Health Goal or PHG: The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Primary Drinking Water Standard or PDWS: MCLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.

ABOUT THE CONSUMER CONFIDENCE REPORT

The Consumer Confidence Report (CCR) is a report that summarizes the testing of contaminants in drinking water. Every year, Carmichael Water District and other water providers are required to prepare and distribute a CCR to all water customers.

The CCR includes a comparison of the district's water quality standards set by the California Department of Health Services (DHS) and the U.S. Environmental Protection Agency (USEPA). The purpose of the report is to let you — our customer — know the quality of your water. This year's CCR concludes that, with the exception of turbidity, our water meets state and federal standards.

With completion of the new membrane microfiltration water treatment plant, the district will be in compliance with all state and federal drinking water standards.

About Your Water Supply

Carmichael Water District provides water to an estimated service area population of 37,000 customers via approximately 10,980 water service connections. This past year, during construction of the new water treatment plant, 67 percent of the water supply for district customers was groundwater. The majority of this came from district wells. In addition, the district purchased groundwater from the Fair Oaks and Citrus Heights water districts to supplement supplies while the new treatment plant was under construction and improvements were made at the Dewey Drive pump station. Upon completion of the new membrane microfiltration water treatment plant, the district will rely primarily on surface water from the American River (80 percent) and supplement its supply with groundwater from district wells.

Important Information About This Report

The water quality chart identifies any constituents detected at a "threshold" level — determined by state and federal regulations. Each constituent is then compared to state and federal goals — the Maximum Contamination Level (MCL) and Public Health Goal (PHG).

A complete listing of all tested constituents are available on the district's web site at www.carmichaelwd.org. If you would like a copy mailed to you, please contact the district at (916) 483-2452.

Carmichael Water District Testing Assures Quality

Before water gets to your tap, Carmichael Water District continually tests your water to make sure it is of the highest quality. State-certified water quality staff take regular water samples, run them through the most up-to-date testing methods, and then retest to verify accurate results. Samples are then measured against state and federal standards to confirm that your water is of the highest quality.

Does your water meet state and federal standards? Here's how to find out:

1. Look on the left hand column of the chart to review constituents that were detected.
2. Compare levels from your supplier's water to the state and federal levels (MCL/PHG).
3. Confirm that your water is of the highest quality.

What You Should Know About Your Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

The sources of both tap water and bottled water include rivers, lakes, streams, ponds, reservoirs, springs and wells. Contaminants that may be present in source water include microbial contaminants, inorganic contaminants, pesticides and herbicides, organic chemical contaminants and radioactive contaminants.

In order to ensure that tap water is safe to drink, USEPA and the DHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Sensitive Populations

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Questions About the Report or Your Water Supply

If you have questions about this report or your water supply, please contact the district office at (916) 483-2452.

Carmichael Water District

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Water Agencies Collaborate with SMUD on New Watering Hours

Midnight to 10 a.m. outdoor watering schedule will help save energy

Over 20 water providers from the Sacramento Area Water Works Association (SAWWA) and SMUD have joined together to ask the public to use less water during peak energy demand hours. Outdoor watering, which accounts for more than 50 percent of all water use, is now recommended between 12 midnight and 10 a.m. when energy demands are lowest.

Every time the tap is turned on, electricity is being used. A tremendous

amount of energy is needed to run the many pumps that obtain, purify and supply water to homes and businesses. After the water is used, it must be pumped to wastewater treatment plants for cleaning. Water pumping is the single most significant use of electricity in the state. Furthermore, pumping water during peak energy use time costs more money. Electricity costs range between 20 and 80 percent of a water utility's total operating budget.

Fortunately, water helps create electricity. Hydroelectric power, generated by surface water, meets between 25 and 29 percent of California's demand for electricity.

Not only is it the most cost-effective source of electricity, it is also the cleanest. This year, however, water run-off throughout California is well below normal and this accentuates the need to be water smart and energy wise.

Local water providers urge the public to do their part by practicing efficient water use at home, especially outdoors where well over 50 percent of water use occurs. For more information about efficient water use, please visit the SAWWA Web site at www.sawwa.org and the SMUD Web site at www.smud.org/conservenergy/hometips_water.html.