**Green River Treatment is in Progress**

In 2005, Tacoma Water took two major steps toward improving public health protection and the quality of the Green River water supply. First, the utility’s new Green River treatment facilities began full operations. This important move supports the Second Supply Project pipeline as well as Tacoma Water’s original pipeline that has been in service for decades. The new plant is safer and more reliable than the facilities it replaced, some of which were more than 30 years old.

Within the last year, Tacoma Water also completed design of a new ozone treatment plant, which is under construction and scheduled for completion in 2007. Why ozone? The Green River is a very well-protected and pristine source of drinking water. But Tacoma Water’s responsibilities in the region also consist of protecting fisheries resources and making improvements needed for salmon survival. These other, required actions will change the nature of the Green River water in the near future.

Tacoma Water will address these changes by treating the water with ozone, a powerful but extremely short-lived chemical. Made using electricity and pure oxygen, ozone is a gas that eliminates natural compounds causing bad taste and odor in the water. At the same time, it removes color from the water and does a much better job of protecting public health against the effects of harmful microorganisms. When the ozone has completed its work, it reverts back to oxygen, long before it reaches any customer.

The new ozone treatment plant is part of the larger Second Supply Project, for which Tacoma Water shares expenses with three partners: Covington Water District, the City of Kent, and Lakahaven Utility District. These three other utilities combined will pay for about one-third of the plant’s costs.
Tacoma Water receives most of its water from the Green River, in South King County. This 231-square-mile forested area serves as a collecting point for melting snow and seasonal rainfall in an unaltered area of the Cascade Mountains between Chinook and Snoqualmie passes. Tacoma Water owns approximately 10 percent of the watershed along the river and forest; other companies and government agencies own most of the remainder.

Through agreements with the landowners, Tacoma Water limits access and carefully controls all activities in the watershed, such as recreation, road maintenance and logging. Careful protection of the watershed preserves the quality of our water so that filtration is not currently required.

Within the watershed, Tacoma Water has six wells on the North Fork of the Green River. We use these wells for utilities when heavy rainfall or spring run-off causes the Green River to be too cold to be sediment.

To meet peak summer demands, Tacoma Water supplements its Green River supply with groundwater from more than 20 additional wells. Most of these wells are located within the Tacoma city limits and at present are treated only with chlorine disinfection.

Tacoma Water’s Green River Watershed Management Plan and South Tacoma Wellhead Protection Program aggressively protect the water supply and enable Tacoma Water to provide over 300,000 people with safe and reliable water.

Tacoma Water maintains its operations and control facilities — a 10-million-gallon reservoir and treatment operations — near the town of Cumberland in South King County. We currently treat the water supply with these substances:

- Chlorine is added as a disinfectant to kill any harmful microorganisms, including bacteria and viruses, that may be present in the water.
- Fluoride is added for dental health benefits, as approved by Tacoma voters in September 1988 and November 1989.

- Sodium hydroxide is added to make water less acidic and to reduce corrosion of customers’ plumbing systems. Water that is too acidic also helps meet health requirements by minimizing the amount of lead and copper that leaches from plumbing into drinking water. If you are concerned about lead and copper levels in your home’s water, you may want to flush your tap until the water is as cold as it can get. This can take 30 seconds to two minutes, depending on recent water use and your home’s plumbing.

FREQUENTLY ASKED QUESTIONS

What is the bottom line on Tacoma Water’s water quality?

Tacoma Water customers enjoy safe, healthful water. We run hundreds of tests each month on water throughout our system. What do we find? Very little. Of approximately 155 potential contaminants we test for, we found only 14 of them in small and non-harmful amounts. All regulated contaminants found in our water are below state and federal maximum contaminant levels.

How can I get involved in water quality decisions?

The Tacoma Public Utility Board, Tacoma Water’s governing body, holds public meetings on the second and fourth Wednesdays of each month at 6:30 p.m. in the Public Utilities Administration Building Auditorium, South 35th Street and Union Avenue. Meetings are broadcast live and can be watched on TV Tacoma Channel 12 in the City of Tacoma; meetings also are shown on cable television in Pierce County. Check local listings for times.

TACOMA WATER

Your Drinking Water: Quality and More
A message from Tacoma Water Superintendent John Kirner

Tacoma Water employees are honored to have the responsibility to meet the water supply needs of Tacoma and the surrounding region. To our staff, this means protecting public health, enhancing our customers’ quality of life, supporting the environment and protecting the natural resources entrusted to us. Still, none of these responsibilities is more important than providing a safe drinking water supply to our customers.

Drinking water safety is the topic of this annual water quality report, which covers all testing completed in 2005. Beyond meeting basic requirements, this report also allows Tacoma Water to tell you what is in our water and describe the measures we take to assure safety of the supply.

The more you understand about your water supply, where it comes from and how it is treated, the better equipped you will be to participate in related discussions and advise Tacoma Water on how we can meet your needs in the future.

Your Drinking Water: Quality and More

The Washington State Department of Health is responsible for determining whether water utilities that use surface water supplies must filter their water. The department determined in early 1992 that Tacoma Water does not need to build a filtration plant as long as it continues to meet all requirements for water quality contained in the Washington Administrative Code 246-290-670. The criteria to remain unfiltered include: seawashed control, quality of water at the source, redundant disinfection components and annual site inspections.

Filtering the water would improve the taste of the water and reduce the amount of silt and sand that enters the pipe system each year. It also would provide protection from contaminants such as Cryptosporidium and regulated chemicals that form when chlorine is added to the water. Filtration is very expensive, however. Tacoma Water, its policy-makers and customers will continue to evaluate the costs and benefits of filtration as a treatment option.

Sources of Tacoma’s Drinking Water

How We Treat the Water Supply

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Cryptoctospordium

Cryptoctospordium is a microscopic organism that, when ingested, can cause diarrhea, fever and other gastrointestinal symptoms. Tacoma Water has tested for Cryptoctospordium in the Green River since 1993. Using the best available testing method approved by the U.S. Environmental Protection Agency, Tacoma Water detected one Cryptoctospordium organism in untreated Green River water in monthly testing in 2005. No evidence of actual Cryptoctospordium-related health problems has been detected in our community.

Drinking Water and Your Health

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.

Some people may be more vulnerable to contaminants, such as Cryptoctospordium, in drinking water than the general population. People with weakened immune systems, some elderly, and infants may be particularly at risk from infections. These people or their caregivers should seek advice about drinking water from their health care providers.

The Safe Drinking Water Hotline, 800-426-4791, provides information about drinking water contaminants and their potential health effects. The hotline also offers guidelines from the Environmental Protection Agency and the Centers for Disease Control on appropriate ways to reduce the risk of infection by Cryptoctospordium and other microbial contaminants.

Cross Connection

Tacoma Water goes to great lengths to ensure that safe and reliable drinking water is delivered to your home. However, once the water goes past the water meter and onto the customer’s property, the customer must help ensure that it remains safe to drink. Tacoma Water’s Cross Connection Control Program works to keep contaminants from entering the water through backflow from a “cross connection.” A cross connection is any actual or potential connection between the water system and any non-drinkable liquid, solid or gas. Typical cross connections include irrigation systems, portable hose connections (such as fertilizer sprayers), boilers and swimming pools.

Properly installed and maintained backflow prevention assemblies will stop the backflow of contaminated water into your drinking water. If you have any questions or concerns about backflow or Tacoma Water’s Cross Connection Control Program, please call Tacoma Water at 253-502-8215 or visit www.tacomawater.com.