



*Northeast Sammamish Sewer and Water District  
Summer 2010 Newsletter  
2009 Water Quality and Water Use Efficiency Report*

**June 2010**

## **Water Use Efficiency**

In September 2003, the Washington State Legislature passed the Municipal Water Supply Efficiency Requirements Act. The Water Efficiency Rule requires all municipal water suppliers to set water efficiency goals and provide annual performance reports on achieving these goals to customers and the Washington State Department of Health.

The District has adopted the following water use efficiency goals:

- Achieve a reduction in water use per ERU of five percent by the year 2021, with 2006 as the base year.
- Increase awareness among all water users of the value and importance of conserving water and of the methods available to achieve reductions in water use.



The goals were adopted in April 2008 and revised in May 2010. The 2007 through 2009 average cubic feet per month per residential equivalent decreased 10% from the 2006

average. The District continues to fund education programs, print conservation tips in our newsletters, have an increasing block rate structure, provide rebates for water efficient clothes washers, meter sources and customer services, provide water conservation kits to our customers and maintain a low leakage rate.

## **Help Prevent Clogged Sewer Pipes and Pumps and Protect Your Home**

The District sewage system consists of many pipes and pumps station. One of the biggest maintenance problems the District has is clogged pipes and pumps. Clogged pipes and pumps can result in sewage backups into homes. Clogs occur when garbage is placed in the sewer system. Customers can help by not disposing of garbage such as disinfectant wipes, paper towels, dental floss, diapers, feminine hygiene products, contraceptives, rags and other solid materials into toilets.

## **Application for 2010 Senior Low Income Discount**

The District offers a Senior Low Income Discount Program, which provides reduced sewer and water rates for customers meeting the income guidelines for the Seattle/King County area published by the Department of Housing and Urban Development (HUD). If you are at least 62 years of age and your total 2009

combined income was less than amounts shown below, you may qualify for the reduced rates.

<b>Size of Family</b>	<b>Total Household Income Not to Exceed</b>
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Applications will be received during the month

1	\$ 30,000
2	\$ 34,250
3	\$ 38,550
4	\$ 42,800

of May and the discount period begins June 1<sup>st</sup>. Applications received after June 1<sup>st</sup> will be effective with the next billing period following receipt of the application.

Forms are available at the District office or you may download the application from our web page at [www.nesswd.org](http://www.nesswd.org) and click on forms. Forms must be returned along with a copy of your 2009 tax return and a copy of photo identification.

If you have any questions, please contact the District office at 425-868-1144.

## Water Conservation

With summer fast approaching, the District's water usage will rise dramatically. We will pump more water in the summer months than the other eight months of the year. Increased water usage is mainly due to customers watering their lawns and plants. Customers are reminded of our conservation oriented rate structure, which has escalating rates for higher usage. Here are a few tips on watering wisely

Outdoor:

- Do not water during the sun's hottest hours - roughly 10:00 AM to 6:00 PM. Three quarters

of your water is lost to evaporation. It can also harm plants.

- If you have an automated sprinkler system, make sure the controller is properly set to achieve minimum watering levels.
- Make sure your sprinkler system is in good repair. Fix leaks and adjust sprinkler heads to eliminate any over-spray on paved areas or buildings.
- Mix compost into the soil when planting. Good soil absorbs water easily, drains well and retains moisture.
- Do not water when windy.
- Use a mulching lawn mower. Leave clippings on the lawn.
- Mulch root areas to help retain moisture around plantings.

Indoor:

- Run dishwasher only when full.
- Check laundry water level. Don't use full water level for half loads.
- Do not leave water running when brushing teeth and shaving. . If the water is running, roughly five gallons per minute is wasted. Two minutes brushing teeth and three minutes shaving is 25 gallons down the drain.
- Check toilets for leaks.
- Install water-saving shower heads.
- Keep a pitcher of water in the refrigerator.
- Check faucets for leaks

## Water Quality

Northeast Sammamish Sewer and Water District is proud of the fine drinking water it provides. This water quality report shows the source of our water, lists the results of our tests, and contains much important information about water and health. Northeast Sammamish Sewer and Water District will notify you immediately if there is any reason for concern about our water. This report is provided annually in conformance with

a federal regulation requiring water utilities to provide this information. The report is technical in nature and we have tried to present it in a clear format.

## **Service Area**

The District is bordered by Lake Sammamish on the west, the Redmond Fall-city Road on the North and approximately 239<sup>th</sup> on the east. Northeast Sammamish Sewer and Water District (NESSWD) overlaps with Sammamish Plateau Water and Sewer District (SPWSD) at the southern border. NESSWD's southern water boundary is approximately NE 20<sup>th</sup> while its southern sewer boundary varies from approximately NE 9<sup>th</sup> to NE 16<sup>th</sup>. Customers in this overlapping area receive a sewer bill from NESSWD and a water bill from SPWSD. The overlap exists because when the developments in this area were originally built, neither District had both water and sewer available in the area. In order for the customers to have both water and sewer, each District provided one of the utilities. This letter is being sent to all of the District's customers including customers in the overlapping area that receive water from SPWSD.

The water system's service area is 99% residential with no commercial accounts except for a couple condominium complexes, one school, Sahalee Country Club and the Sahalee Maintenance Association. There are no industrial customers in the District.

## **Water Sources**

In 2009, the District distributed approximately 278 million gallons of water. The District is supplied entirely by ground water pumped from five wells. The District has three wells in the Evans Creek Valley Wellfield and two on the Plateau. These wells serve approximately 3,260 connections or about 10,430 people. The water is untreated.

The District adopted a wellhead protection plan in 1995. The plan defined wellhead protection areas (WHPA) for each well or wellfield. Contaminant inventory and risk assessments were then conducted for each WHPA. The risk assessment determined that all identified potential contaminant sources were of low risk to the District's wells. The Washington State Department of Health has assessed a low contaminant susceptibility rating to wells 3 and 4. The well field was assigned a moderate susceptibility rating. The District continues to monitor for new risks that may arise.

## **Storage**

The District has three storage tanks. The District has two half-million gallon underground reservoirs and one three million-gallon tank that is shared with the District to the south, Sammamish Plateau Water and Sewer. Both Districts pump water into the tank from their wells and withdraw the water as needed. As a result, customers in Northeast Sammamish Sewer and Water District also receive water from Sammamish Plateau's sources. Please call Sammamish Plateau Water and Sewer for Water Quality Information on their sources at 425-392-6256.

## **New Storage Project and Arsenic Removal**

The District has completed construction of a .5 million gallon water reservoir, a booster pump station and arsenic removal facility.

The reservoir is underground and the booster station and arsenic treatment facility are located above ground, on top of the reservoir. The arsenic removal facility is necessary to meet

EPA requirements. The allowable maximum contaminant level for arsenic was reduced from 50 parts per billion (ppb) to 10 ppb. The District's water from its wells 3 and 4 occasionally exceeds this level.

Water from wells 3 and 4 has been rerouted directly to the arsenic removal facility. The arsenic is then removed from the water before the water enters the distribution system. The water is filtered with an iron-based media. As water is filtered through the media, arsenic particles passively adsorb or adhere onto the iron surface without the use of chemical additives. The treatment plant was operational in November, 2009.

## Keeping Your Meter Clear

Our District requires clearance of two feet around the meter and six feet above. In addition to needing access to read the meters, the District needs access for any repairs or maintenance. The District is in the process of replacing existing meters with radio read meters, so it is especially important that District staff be able to access meter. Please ensure that the District has proper access. If the District has problems accessing your meter, you will be notified of the need to clear around the meter. If the meter is not subsequently cleared by the homeowner, the District will perform the clearing at a cost of \$75.

## Health Information

To ensure that tap water is safe to drink, the United States Environmental Protection Agency (EPA) prescribes limits on the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants (coliforms), such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics which are by products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The FDA

regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than is the general population. Immuno-compromised 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. EPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are

available from the Safe Drinking Water Hotline (800-426-4791).

## **Water Quality Tables**

The following tables present the results of our 2009 water quality monitoring. Where tests are required less than annually, the most recent results for the monitoring period are presented.

The first table shows results of testing of our sources (wells). The second table shows additional test results. For more information about this report, contact Laura Keough at 425-868-1144.

### **Summer Help Wanted**

The District has an opening for a temporary maintenance person. For more information call 425-868-1144.

### **Board Meetings**

The Board of Commissioners meets the first and third Thursday of each month at 3:00 p.m. at the District Office located at 3600 Sahalee Way NE Sammamish Sewer and Water District. Customers are welcome to attend these meetings.

### *Source Water Testing Results*

<b>Detected Regulated Substance</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>Average</b>	<b>Range</b>	<b>In Compliance?</b>	<b>Major Sources in Drinking Water/ Comments</b>
<b>Radioactive – 06/2006, 12/2006</b>							
No radioactive contaminants were detected							
<b>Inorganic and Physical :</b>							
<ul style="list-style-type: none"> <li>• <b>Complete Inorganic &amp; Physical Tests - Wells 3 &amp; 4 05/2004, Evans Creek Well Field 05/2007</b></li> <li>• <b>Arsenic - Well 3 – 5/2009, 9/2009; Well 4 5/2009; Evans Creek Well Field 05/2007; Crest Arsenic Removal Facility 6/2009, 7/2009, 12/2009</b></li> <li>• <b>Nitrates &amp; Nitrites – Wells 3 &amp; 4 06/2009, Evans Creek Well Field 05/2009</b></li> </ul>							
Arsenic	ppb	10	0	4	0-9	Yes	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes. See below discussion.
<p>Arsenic: While your drinking water meets EPA’s standard for arsenic, it does contain low levels of arsenic. EPA’s standard balances the current understanding of arsenic’s possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. The District’s Crest Arsenic Removal Facility was placed in operation in November 2009.</p>							
Nitrate	ppm	10	10	.26	0-.78	Yes	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Synthetic Organic Contaminants (SOC’s) 05/2009 and Volatile Organic Contaminants (VOC’s) Wells 3 and 4 08/2009, Evans Creek Well Field 05/2009</b>							
None were detected.							
No SOC’s have ever been detected in the District’s water supply.							
No VOC’s have ever been detected in the District’s water supply.							

<b>Other Water Testing Results</b>						
<b>Test Performed</b>						
<b>Microbiological (Coliforms)</b>						
<b>Regulated Substance</b>	<b>Amount Detected</b>	<b>MCL</b>	<b>MCLG</b>	<b>In Compliance?</b>		
Total Coliform Bacteria	0	1	0	Yes – Purveyors are required to collect coliform samples from representative points throughout the distribution system at least once a month. The number of necessary sample is based on population served and the District is required to collect nine samples per month. No coliforms were detected during the District’s routine sampling in 2009.		
<b>Asbestos – 8/2009</b>						
No asbestos was detected.						
<b>Lead and Copper – 09/2008</b>						
	<b>90<sup>th</sup> Percentile</b>	<b>MCL</b>	<b>MCLG</b>	<b># of Homes Exceeding Action Level</b>	<b>Range of Results</b>	<b>In Compliance?</b>
Lead (ppb)	ND	AL = 15	0	0	ND	Yes
Copper (ppm)	.23	AL = 1.3	1.3	0	ND - .37	Yes
In March 1994 the District was allowed to reduce sampling frequency to once per year and the sample size to 20. Samples are first draw from residential housing. In 1997 the District was able to reduce the frequency to once every three years.						
No homes tested in the District have ever exceeded the action levels for lead and copper.						

Footnotes to Tables:

MCLG or Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MCL or Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. The MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

AL=Action Level

MFL = Million fibers per liter

pCi/l= picocuries per liter (a measure of radioactivity)

ppm= parts per million, or milligrams per liter (mg/l)

ND – None detected

n/a – Not applicable

ppb – parts per billion or micrograms per liter