



LAKEHAVEN UTILITY DISTRICT

31627 1st Ave. S. | PO Box 4249 | Federal Way, WA 98063-4249
Federal Way: 253-941-1516, Tacoma: 253-927-2922 | www.lakehaven.org

March - April 2006

Commissioner's Corner

Dick Mayer



I trust that you were able to stay reasonably dry during the wet winter months and emerged with at least some of your sense of humor intact. Looking on the positive side; if the law of averages really works, we should have a great summer this year!

I want to take this opportunity to welcome a new group of sewer customers to the District. The District recently completed a project that will bring sewer service to the Lakota Beach neighborhood. While the installation of utility improvements to bring sewer service to a new area of the District is fairly commonplace, the project that led to the installation of sewers in this neighborhood is unique and its evolution is a story worth telling.

As many of you know, the Lakota Beach neighborhood lies just north of the Lakota Wastewater Treatment Plant. Several years ago, a group of Lakota Beach residents, interested in obtaining sewer service, contacted the District to learn about the options for connecting their neighborhood to the sanitary sewer system. With the preliminary information we were able to provide them at the time, these individuals proceeded to survey the neighborhood to gather information on the support for sewer service. Although the support certainly was not unanimous, the level of interest was sufficiently high to suggest that a project was possible. In light of this preliminary sign of interest, the District undertook additional study to develop a more complete plan for bringing sewers to Lakota Beach.

Although the neighborhood is very close to the plant, it lies at an elevation below the level where sewage enters the treatment plant. Consequently, gravity service was not a possibility. The standard approach to deal with this type of situation would have been to locate a pump station at the low point in the local area. Such a facility would then gather flows from the neighborhood collection system and pump the sewage up to the plant for treatment. The problem in this case was that the low area in the Lakota Beach neighborhood is the beachfront, and environmental regulations make it very difficult to locate sewer infrastructure in tidelands.

The best answer to this dilemma of topography appeared to be a low-pressure sewer system. A low-pressure system utilizes shallow, pressurized sewer mains that collect sewage flows from the small grinder pumps that serve each lot. One of the great benefits of these systems is the lower cost of installation of the local collection facilities. This results in lower connection charges to the property owners. The shallow lines can be installed by "trenchless" construction methods that, unlike the methods used to install deeper gravity lines, do not require road cutting. Additionally, much of the surface disturbance to landscaping and other improvements that comes from deep trenching can be avoided. The cost savings are offset, to some degree, by the additional cost to the homeowner of installing and maintaining the grinder pump, however, in total, the cost of these systems can compare favorably to the cost of gravity sewers.

It is never easy to steward a project like this from start to finish. The perseverance of the Lakota neighbors was impressive and contributed mightily to the ultimate success of the project. Our staff put in a tremendous amount of time to make this project a reality and their efforts should be commended as well.

Leonard D. Englund
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Charles I. Gibson
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Donald L.P. Miller
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A number of other areas are currently investigating sewer service through the use of low-pressure systems. As our budget allows, we will do whatever we can to help make sewer service available to those wishing to connect to the system. If you are interested in sewer service, don't hesitate to contact the District's Development Services Section at telephone numbers (253) 945-1580 or (253) 945-1581.

Thanks for your interest in the District.

WATER FESTIVAL



Water Festival for 4th and 5th Grade Students held at Highline Community College each Year

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The 7th annual regional Water Festival was scheduled to be held at Highline Community College on March 21st & 22nd with Governor Christine Gregoire as the Guest Speaker.

The Water Festival is an educational fun-filled event (One class is entitled "As the Faucet Turns") held to teach students about water quality and related natural resources. Last year, 250 students from the Federal Way School District attended the event. Lakehaven Utility District paid a total of \$2,500 for their registration fees as a means of teaching water conservation.

Over 1,600 students from 5 school districts benefit from the program. Students rotate through a number of educational activities to learn how to protect natural resources and use them wisely. They learn how water affects their environment, about wellhead protection, wetlands, and a community water distribution system.



WHAT HAPPENS WHEN IT RAINS?

On average, about 36 inches of rain falls from the sky over the Federal Way upland area each year. One-tenth of an inch of rain over the roughly 34-square miles of Lakehaven's service area is about 60 million gallons of water. As we all know, the rain may drizzle down in trace amounts over long periods or it might come down in buckets as it did this last January when over 12 inches of rain drenched our community. So what happened to the 7.2 billion gallons of water that we saw in January? Did it simply run away from us or are our groundwater supplies overflowing? Quantifying where it all went is not a simple matter. It takes only days to convey most of the rainfall away from us through the stream channels and drainage courses developed in the area, but multiple years to significantly change the groundwater tables in the aquifers that supply us with drinking water. During heavy rains, most water is lost to runoff. It is the long periods of light rain that tend to keep the soils saturated which in turn helps drive the water vertically to the groundwater tables. This has historically meant that we can recover on average 9 to 12 million gallons per day from our local groundwater sources all year no matter how much it has rained in the past. In general terms this means that our groundwater sources rely on about 15% to 20% of the average annual rainfall total, not individual month totals. The balance of the annual rainfall supports our local springs, streams and vegetation, or simply runs off or evaporates back to the atmosphere. From a water supply stand point we dislike the downpours just as much as the next person, but we do enjoy the Northwest drizzle.

WELL 29 PROJECT

The Well 29 Project is nearing completion and with start-up scheduled for spring of 2006 will provide Lakehaven Utility District with another source of high quality drinking water. This well was drilled in 1996 but was not put into service at that time because of issues related to obtaining a state approved water rights permit and water quality issues which have since been resolved. Well 29 is located on the east side of Lakehaven Utility District's distribution system and is designed to pump water from the Eastern Upland Aquifer system.

The well will also be an important source of water for emergency situations and especially during an event that may cause a disruption of normal water service on the east side of our water system. Water quality data from Well 29 shows the natural chemistry of the groundwater from this well meets all federal and state primary drinking water standards. However, the groundwater exceeds some secondary standards that are considered esthetic issues but

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not a health concern. A natural dissolved mineral in the water called manganese and a small detection of hydrogen sulfide odor are the only secondary standards that are of issue with water quality for this well and these natural inorganics will be removed before the water enters the distribution system by a new water treatment filtration facility constructed at the well site.

KIDS CORNER

Washington is earthquake country. When the ground starts to shake, “Drop, Cover, and Hold”. If you feel an earthquake, drop and cover under a desk or sturdy table. Stay away from windows and objects that could fall. Hold onto the desk or table. If it moves, move with it.

Do not run – stay where you are and “Drop, Cover, and Hold”.



TIPS TO SAVE & CONSERVE WATER

- When washing dishes by hand, don't let the water run while rinsing. Fill one sink with wash water and the other with rinse water.
- Enrich soils with 3-4 inches of compost worked into the top foot of soil prior to planting.

Your Board of Commissioners

Beverly J. Tweddle - President
Don Miller - Vice President
Tom Jovanovich - Secretary
Dick Mayer - Commissioner
Ed Stewart - Commissioner

Regular Board of Commissioners meetings are held the 2nd and 4th Thursdays of each month.
These meetings are held at the Lakehaven Center at:

Lakehaven Center
31531 First Ave. S.
Federal Way at 6 p.m.

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