



Ronald Wastewater Review

A quarterly publication of news and information for customers of Ronald Wastewater District

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Unsung Heros

Not only is our work here at Ronald Wastewater District seen as unglamorous -- if it's seen at all -- but it is also easy to take for granted. Wastewater conveyance and treatment is a service people expect. So when you flush your toilet, bathe, wash clothes, you probably don't think about the bad things that could happen if there was no place for the waste to go.

For the next few moments, imagine life without clean water. In some cases, all you have to do is recall the not-so-distant past. Thousands of Americans died in the 1800's due to lack of wastewater treatment. In 1850, water-borne cholera claimed the lives of 400 people in Chicago in less than 2 months.

As recently as the mid-1950's Seattle's North Trunk Sewer discharged 40 million gallons of untreated sewage into Puget Sound every day. Completion of the region's major sewage-treatment facilities has brought dramatic results. Effluent, which at one time entered Lake Washington at 20 million gallons a day was reduced to zero discharge in February 1968 ①.

Fortunately the closest most of us come to experiencing waterborne disease is through history books. Waterborne diseases are no longer a serious threat in our society because proper wastewater conveyance and treatment has become commonplace.

When you consider that 2.4 billion people in the world do not have access to basic sanitation or clean, safe water and that 4 million die every year from waterborne diseases, you can begin to comprehend the immense contribution of sewers

to humanity ②.

Vastly improved sewage conveyance and treatment systems in the United States are one of the great and largely unheralded victories of the environmental movement, despite how frequently this gift is overlooked.

References:

- ① King County Department of Natural Resources
- ② World Health Organization

Keeping things flowing



Ronald Wastewater District maintains 176 miles of sanitary sewer pipeline to convey wastewater to the treatment plant. One of the primary activities for maintaining this system of pipelines is pipeline cleaning. This activity actually entails four separate cleaning tasks, each with their own specific maintenance schedule. These tasks are normally done by a two-person crew using what is commonly referred to as a "vacator" or "jet truck." This vehicle uses a high velocity water hose and an assortment of nozzles and cutters to clean the pipes. A large vacuum built into the vehicle is used to remove any accumulated debris from the manholes. Pipeline cleaning includes the tasks of routine cleaning, grease removal, root removal, and

debris removal.

Routine high velocity water cleaning is generally done on all system pipelines with no known problems. Routine cleaning keeps the pipeline sediment free and removes any build-up of debris. It also eliminates any accumulation of hydrogen sulfide gas that accelerates pipe deterioration. Routine cleaning is done once every three years.

Grease removal is done on pipelines with known grease accumulation problems. Grease build-ups in pipelines is one of the primary causes of sewer backups and overflows. Identifying pipelines with grease problems and accelerating the cleaning schedule greatly reduces the risk of backups and overflows. Known grease lines are cleaned every six to twelve months depending on the severity of the problem.

Root removal is performed when a pipeline begins to experience root intrusion problems. Roots invading a pipeline is one of the other primary causes of sewer backups and overflows. Identifying pipelines with root problems and routinely rodding or root sawing to clear a pipeline also greatly reduces the risk of backups and overflows. Root problem lines are cleared once every 12 to 18 months depending on the severity of the problem.

Debris removal is done on pipelines that have a tendency to accumulate debris due to low points or dips in the line, connections to the main line that stick into the pipe (protruding taps), broken pipe, side sewer construction and repair work or cross-connections. Pipelines with debris buildup problems are cleaned once every year.

District Garage

On January 26, 2007 the District entered into a Letter of Agreement with Architects Kubota Kato Chin to develop a concept for a proposed garage building for the District's maintenance vehicles. This first phase of the project will look at the District's existing facilities and projected needs, and develop a design concept and full

construction budget.

Completion of phase one will provide the District with the necessary documents to proceed with construction, should the Board decide to do so. The cost of phase one is \$33,420.00. More information is available at the District office. Please ask for either Michael U. Derrick, the General Manager or George Dicks, the Maintenance Manager.



NEW STAFF

Ronald Wastewater District is pleased to introduce its newest employees. Mr. Brent Proffitt, who was a maintenance technician, is now part of the Planning and Development Team. He has been with the District for three years. Ms. Cindy James was hired at the beginning of the year to fill a vacant accounting clerk position. She brings over 23 years of accounting and office experience to the District. Ms. Jennifer Tager was hired in February to fill another open position in the accounting department. Mr. Clayton Putnam was also hired in February to fill the vacant Information Technology Analyst position. He holds a BA Degree in Geography from the University of New Orleans. He will oversee the District's Geographic Information System and other IT related tasks. If you are interested in working for Ronald Wastewater District, please stop by our office and complete an application. Please bring a resume and a cover letter.