Wastewater

Who manages wastewater treatment infrastructure in the Green River Valley?
Since 1958, the wastewater treatment utility now operated by King County has provided wholesale wastewater treatment services for 17 cities and 17 sewer districts in the central Puget Sound region, including those in Auburn, Kent, Tukwila and Renton.

These cities and sewer districts collect wastewater from homes and businesses in their respective service areas and send it to King County's regional wastewater treatment system. One of the facilities King County operates is the South Treatment Plant, which is located in Renton and is within the Green River Valley flood zone.

In addition to the South Treatment Plant, the county operates and maintains the large regional sewer lines called "interceptors" that carry the wastewater collected by the local utilities to the plant. The county also operates two wastewater pump stations in Tukwila and Auburn, and a stormwater pump station on the Black River.

Will flooding affect South Treatment Plant in Renton?
Even during significant flooding in the valley, King County expects the plant can continue treating wastewater. The plant is dependent on electricity to operate and has dual power feeds and onsite power generation capabilities. It will pump and treat as much flow as it can handle. Flows beyond its capacities will be diverted to the Green River through an emergency outfall.

Wastewater Treatment Division staff are making provisions to keep the South Treatment Plant staffed and operating even during severe flooding. The plant sits at a higher point of elevation than the surrounding area, and plans are in place to build a temporary levee system to prevent water intrusion at a low point at the plant. We do not anticipate a need to evacuate the plant.

What about the sewer lines that carry wastewater?
Flood waters are expected to have the greatest impact on the local sewer lines and King County's regional conveyance lines that carry wastewater from homes and businesses to South Treatment Plant in Renton.

During a severe flood, inflow from the flood water could overwhelm the capacity of the local and regional sewer lines, potentially forcing wastewater to back up into homes and businesses. Local system backups could occur even outside flooded areas. Toilets and drains might not work, and home plumbing may be unusable for several days.

The local and regional wastewater system was not designed to handle flood water. The surging lines and associated backups would be a result of the flood, and not a result of a malfunction of the sewer system.

King County

Green River Flooding
ARE YOU READY?

How might sewer service interruptions affect the Green River Valley?
Green River Valley communities could be on their own for several days following a flood, and residents should plan to provide for their own hygiene and sanitation needs in the event of flooding, backups, and possible sewer service interruptions.

Will sewer service be affected outside flooded areas? Will people be told to stop flushing their toilets?
Sewer backups and overflows can occur in south King County neighborhoods that aren't flooded.

Depending on the severity of flooding and its impact to the treatment system, King County may issue a general curtailment advisory asking people to limit their use of the sewer system. This may include waiting to do laundry or wash dishes, not using garbage disposals, taking short showers when necessary or minimizing toilet flushing. However, King County will not tell people to stop flushing their toilets.

What are the health and safety risks of sewer backups? How do I protect myself and my family?
In addition to the sewage, flood waters may also contain an array of chemicals, debris and household waste.

The Wastewater Treatment Division is working closely with Public Health – Seattle & King County to ensure people know what to do in the event of a backup in their home, and how to maintain proper sanitation and hygiene if home plumbing systems aren't functioning.

What do I do if my drains and toilets won't work?
During severe flooding, toilets and drains might not work, and home plumbing may be unusable for several days. Sanitation and good hygiene are especially important to stay safe and avoid serious illness.

Stock up on hand sanitizer and personal care wipes to keep hands clean when soap and clean water aren't available.

If your toilet isn't working, have an alternative available. Camping toilets or a lidded bucket lined with a trash bag can temporarily serve your sanitation needs.

Also, don't use washing machines, dishwashers, or garbage disposals until your plumbing is again functioning normally.

How do I respond to an overflow or backup in my home?
Always put your personal safety first in responding to overflows. Entering a flooded basement, bathroom, utility room or kitchen creates a risk for accidental electric shock, exposure to contaminants and possible injury from rushing water. Never enter a flooded area unless you are certain it's safe to do so.

If you can safely access a flooded area, turn off circuit breakers and unplug electrical appliances, but don't attempt to do so if you must stand in or make contact with water.

Prevent the spread of contaminants and odors by turning off forced air furnaces and covering vents. Don't use wet/dry vacuums because of the danger of electrical shock and the spread of aerosolized germs by the fan motor.

When dealing with a back up, wear rubber gloves and boots and wash hard surfaces like linoleum with a bleach solution made up of one part bleach to 10 parts water. Remove boots and gloves before returning to unaffected areas. Sanitize hands thoroughly after handling any contaminated items. Use bleach to sanitize mops and sponges, or throw them out. Many porous items like carpets, draperies and saturated drywall cannot be properly sanitized and must be thrown out.

Consider calling a professional cleaning service. Water damage restoration experts can be found in the Yellow Pages under "Water Damage Restoration."

Additional detailed information on responding to sewage overflows is available on our Web site at http://www.kingcounty.gov/sewagespills.

What about people in my household with special health needs?
Young children, the elderly, and people with weakened immune systems or respiratory ailments such as allergies or asthma are especially vulnerable to illness. If a flooded area in your home can't be isolated, take people with health concerns to another location.

Call a healthcare provider right away if you or a household member feels sick after coming into contact with flood water or a sewer backup.

What resources are available to help property owners with flood-related damage?
Though property owners can apply for Federal Emergency Management Agency compensation for flood-related sewer backups, it's still a good idea to know in advance what your own homeowner's insurance will cover. Some policies do not cover wastewater backups from the local system unless you purchase a rider.

Also consider purchasing flood insurance, as a standard insurance policy will not cover flood damage. Information is available at www.fema.gov/business/nfip/qanda.shtm.

Will a backflow preventer keep wastewater from backing up into my home or business?
Backflow preventers are an option for property owners to consider. We encourage people with specific questions to consult with their local sewer agency or a plumber to learn how backflow preventers work and whether or not one would be appropriate for their home.

Can I open a manhole lid to let flood water drain off of the street?

DO NOT OPEN MANHOLE LIDS! It is extremely dangerous and creates a serious public safety hazard.

An open manhole lid will only increase the volume of water in overwhelmed pipes and cause additional sewer backups that could damage property and injure people. More importantly, an open manhole lid could have deadly consequences. There is a risk for someone to fall into the open manhole and into the rapidly rushing water inside the pipe.

How much water is South Plant expected to treat?
During a severe flood, King County's South Treatment Plant expects to treat about 325 million gallons of flood water and wastewater every day for a week or longer. To put this in perspective, that would equal about 325 Olympic-sized swimming pools going through the plant each day for about eight days.

Are there dangers from sewage in the flood waters?
Sewage is a public health risk because it contains pathogens that could make people sick. It's reasonable to assume that flood water will contain sewage that has overflowed and backed up from overwhelmed local and regional sewer lines.

While sewage from homes and businesses contains human waste, it also contains wastewater from tubs, showers, washing machines, dishwashers, garbage disposals and sinks.

Flood water on its own is also extremely dirty because in addition to sewage, it often contains debris and a variety of household and organic wastes. Avoid contact with flood water whenever possible because of the possible health and safety risks.

Where can I get more information on flood preparation?
There are many resources that can help people with questions about how to prepare for flooding, including King County's Web site, http://www.kingcounty.gov/environment/waterandland/flooding.aspx. Cities in the flood zone also offer additional information:

City of Renton
http://rentonwa.gov/

City of Auburn
http://www.auburnwa.gov/

City of Kent
http://www.ci.kent.wa.us/

City of Tukwila
http://www.ci.tukwila.wa.us/

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