

From The Director's Office:

Coronavirus Monitoring

The City was selected to participate in the expansion of the Center for Disease Control (CDC) National Wastewater Surveillance System to monitor our community wastewater for Covid-19. This is a nine month program that will last through the end of January 2023 and provide data directly to the CDC.

The unique benefits from this CDC-sponsored program include:

- Providing localized data to federal public health agencies on the spread of COVID-19
- Participating in the largest genomic sequencing program of wastewater to determine COVID-19 variants of concern circulating in communities
- Allowing rapid access to community data in a user friendly format to improve local public health decision-making

Throughout the pandemic and especially during the recent Omicron wave, wastewater data has been a reliable, comprehensive data source for tracking Covid-19.

Since everyone uses the restroom, all active infections are captured by wastewater analysis—regardless of one's vaccination status, the presence of symptoms, or whether one is seeking a test.

Wastewater data can also be a "leading indicator" of infection rates because infected individuals shed the SARS-CoV-2 virus in their stool upon infection and often before symptoms surface.

Twice a week plant staff collects and submits samples for analysis and the results are submitted to CDC and each week the City receives a report (see the following page) showing the effective virus concentration for our community.

We are proud to participate in this program that may help scientists to better understand the public health impact of Covid-19 within communities and will provide more update as the program continues.



Best Regards,

Delora Kerber, Public Works Director

Coronavirus Monitoring, continued



Biobot Analytics

COVID-19 CDC NWSS Program Report
Report provided: July 30, 2022
Kit ID: KIT-49974

Wilsonville Wastewater Treatment Plant

Sample collection date: July 28, 2022

SARS-CoV-2 virus in wastewater

DETECTED

Virus concentration
(copies per liter of sewage)

3,135,648

Effective* virus concentration
(copies per liter of sewage)

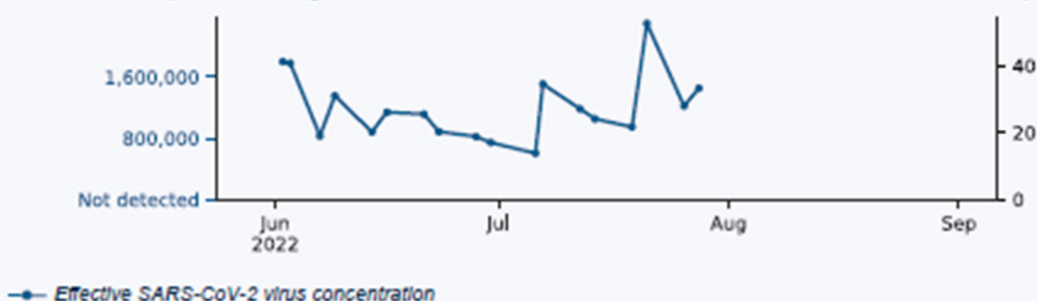
1,453,322

**Effective virus concentration value is derived by adjusting the raw virus concentration to account for dilution and other factors.*

Effective virus concentration over time

Effective SARS-CoV-2 virus
concentration (copies / L of sewage)

New cases in county
on sampling date



The effective virus concentration reported by Biobot is different from the results reported on CDC's [Covid Data Tracker](#). CDC results are normalized using flow and population, whereas Biobot normalizes to a fecal strength indicator measured in your sample.

Learn more about Biobot's normalization and effective concentration methodologies by visiting biobot.io/covid19-report-notes and support.biobot.io

For county-level, regional and nationwide views of the data, please visit biobot.io/data

Utilities—Wastewater & Water

Getting to the Root of the Issue

The Wastewater crew has been conducting manhole inspections and repairs with a focus of root mitigation. This month's target area is Charbonneau, which has older sections of sewer and an abundance of mature trees. Tree roots love to make their way into the nutrient rich waters of the sewer system and if not mitigated can cause blockages and backups.



Before



After

Roots can often be removed from the topside of the manhole using extension pole tools. There are a variety of tips that can be attached to the extension poles to cut, scrape, or grab roots or other objects down inside. Occasionally, the crew has to enter the manhole to remove roots and perform some grouting seal off and prevent future root intrusion.



Tim extracting roots

Utilities—Wastewater & Water

Potholing

Staff also assisted with potholing to gather information about the force main leaving the Charbonneau pump station. Using the combo cleaning truck, they excavate down to the pipe. The exact location is recorded as well as the depth, diameter and pipe material. This information will contribute to the design of the pump station upgrade project.



Potholing to expose pipe

Weekly Well Run

Each week a tech operates each of the City's emergency backup wells and inspects the facilities. The well is run to "waste", meaning that the water is pumped out into the storm system rather than into the distribution system. This freshens up the water and ensures that the pump and its associated components are exercised and function properly.



Chad operating the well

Roads & Stormwater

Keeping It Clean

Staff wrapped up the annual catch basin cleaning and started our yearly water quality manhole cleaning and outfall inspections. Maintenance and inspections are completed at the driest time of year with the least amount of groundwater and surface water inflow into the system.



Jay & Tim cleaning a Stormwater manhole

The Roads crew power-washed on Boeckman Road and prepared sections of roadway for the upcoming 2022 Slurry Seal Project, part of the City's annual Street Maintenance Program. Sealing is scheduled to take place in the Willamette Way, Guiss, Montebello-Serenity and Meadows neighborhoods.



Ricardo power-washing on Boeckman



Eric doing prep for slurry seal

Facilities

Cooling at the Elligsen Pump House

Due to the extreme temperatures during the last week of the month, the Facilities staff helped set up a portable air conditioning unit to keep the Elligsen Pump House cool. The facility houses the drinking water system's radio transmitter, a vital part of our telemetry system. The telemetry system provides constant monitoring of water use data, giving technicians 'real time' status of operations and ensuring that there is enough water to meet demand.



Portable A/C unit at work

The portable unit was originally purchased as a backup cooling system for the City's server room and it came in handy to reduce the interior temperature. The hot air was forced out through the existing exhaust fan in the ceiling. The unit has a condensate tank, that, as it fills with condensation, will automatically shut down and avoid an overflow of water. It was fitted with a piece of tubing that directed the overflow into the floor drain, allowing continuous operation over the very warm weekend.



Venting the hot air



Draining condensation