

## Did you know?

- ✓ Molalla is investing in the City's wastewater systems.
- ✓ Improvements will bring the systems into regulatory compliance and provide capacity for growth.
- ✓ The Molalla River, Bear Creek and other streams will be protected.
- ✓ These improvements will require increases in wastewater rates for Molalla homes and businesses.



# August 2019 MOLALLA CITY HALL OREGOT OREGOT August 2019

## **Investing in Molalla's Wastewater Systems**

Sewage from Molalla homes and businesses is treated at the Molalla Wastewater Treatment Plant along the Woodburn-Estacada Highway. Despite efforts to improve operations, the plant has been unable to reliably meet permit requirements. In 2017, the City embarked on a multi-year program to bring the existing wastewater systems into compliance and start preparing for the future. These improvements will require increases in wastewater rates for Molalla homes and businesses.

#### Where does sewage go after it leaves my home or business?

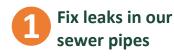
To protect public health and the environment, sewage travels through a network of buried pipelines and pumps (the sewer collection system) to Molalla's wastewater treatment plant. The final use of the treated water from the wastewater treatment plant, the "effluent," depends on time of year.



**In summer**, effluent is used for irrigation. Reuse of treated effluent preserves our water resources and keeps effluent out of the Molalla River when river flows are low and temperatures are high.

**In winter**, effluent is treated and returned to the Molalla River. High winter flows from rain and snow increase the river's capability to accept treated wastewater.

#### What needs to be fixed?



Molalla's sewer pipelines are aging – most are over 60 years old. As they get older, they leak, allowing groundwater and stormwater to enter the sewers and mix with the wastewater in the pipes. The City is working to fix leaky pipes and reduce wet weather flows going to the treatment plant.

# Upgrade our treatment plant

Dyer Partnership engineers completed a Wastewater Facility and Collection System Master Plan in 2018. Work is underway to improve the plant's function and avoid chronic permit violations. Cost savings and expedited schedules on key projects are bringing the treatment plant into compliance faster than planned.

# Update our discharge permit

In 2004, Molalla invested in a new pump station and pipeline to discharge treated wastewater to the Molalla River instead of Bear Creek. The Molalla River has much higher flows, but the permit is still based on discharge to Bear Creek. The Oregon Department of Environmental Quality (DEQ) is reviewing our request for an updated discharge permit.

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## **Protecting the Molalla River while** keeping wastewater affordable

Oregon Department of Environmental Quality (DEQ) regulates disposal and reuse of treated wastewater. A treatment plant's discharge requirements are prescribed in its National Pollutant Discharge Elimination System (NPDES) permit. Some rules apply to all wastewater treatment plants in Oregon; others are based on the specific river or stream where the treatment plant discharges.

In the past two years, the City has completed rigorous scientific and engineering studies to understand the capability of the Molalla River to accept treated wastewater. Based on those studies, the City has requested that DEQ modify Molalla's discharge permit to be consistent with Oregon rules and similar facilities across the state.

#### Why does the permit need to be modified?

In 2004, Molalla invested in a new pipeline and pump station so the wastewater treatment plant could discharge to the Molalla River instead of to Bear Creek. The Molalla River is larger with a much greater capacity to accept treated wastewater – the City's discharge permit doesn't currently reflect that.

#### What's the shoulder season?

Molalla is also requesting changes to the permit that would allow discharge during the "shoulder seasons." The shoulder seasons are the periods at the beginning and end of summer. In the winter season - November 1 through April 30 – the City is permitted to discharge fully treated wastewater to the Molalla River. During the summer season, when discharge to the river is not allowed, treated wastewater is recycled for irrigation.

When there is a lot of spring or fall rain (during the "shoulder season"), the lands used for irrigation become saturated with rain water. This occurs when Molalla River flows are high, but discharge is not allowed under the current permit.



Molalla's requested discharge permit modifications are consistent with Oregon rules designed to protect our stream and rivers.

#### **Shoulder Seasons** Summer Periods at the ends of the summer (May 1 to Oct 31) Effluent is reused to season when land application doesn't work due to high rainfall irrigate agricultural land F M A M J J A S Winter (Nov 1 to Apr 30) Effluent is discharged

to the Molalla River

### What has Molalla accomplished so far?

#### Improving our water recycling program

In summer, Molalla's recycled wastewater is used to irrigate local fields. The water quality of the treated effluent (its "Class") must be appropriate for the land and crop it's being used to irrigate and the level of public access. An amendment to the City's Recycled Water Use Plan was completed in December 2017. Under the new plan, the City commits to producing Class C recycled water – approved for irrigation of grass and pasture lands. The City has also been upgrading its equipment and operations. These improvements are bringing the program into compliance with Oregon rules and help protect local streams and rivers.



Molalla's treated wastewater is used to irrigate local fields.

#### Fixing leaky sewer pipes

Molalla is well on its way to eliminating places where rain and groundwater leak into the City's sewer system – this problem is called Inflow and Infiltration or I&I. A study in 2018 identified the biggest sources of I&I. Since then, the City has grouted 58 leaking manholes, sealed more than 100 open cleanouts, and fixed all sites where storm drains were flowing into the sewer system. The first pipeline replacement project is currently being constructed along Fenton Ave and the six remaining pipeline projects will be complete by 2023. Reduced leakage means less water to be treated - saving the City money on needed improvements at the wastewater treatment plant.



Inspections pinpoint leaky pipes and yield cost savings.

#### Improvements at the Wastewater **Treatment Plant**

The City has been making steady improvement at the existing plant. Changes include removing built-up solids to help the treatment lagoons to work better, improving the facilities that screen incoming wastewater, and upgrading a pump station to be more reliable. These projects have improved the quality of treated water discharged from the plant. The City's focus now turns to preparing for the future by designing and constructing an expanded wastewater treatment plant. The City is working with DEQ to finalize discharge permit requirements. Once a final permit is received, it will take three years to design and construct the new plant.



Molalla's wastewater plant is being upgraded to meet regulatory standards