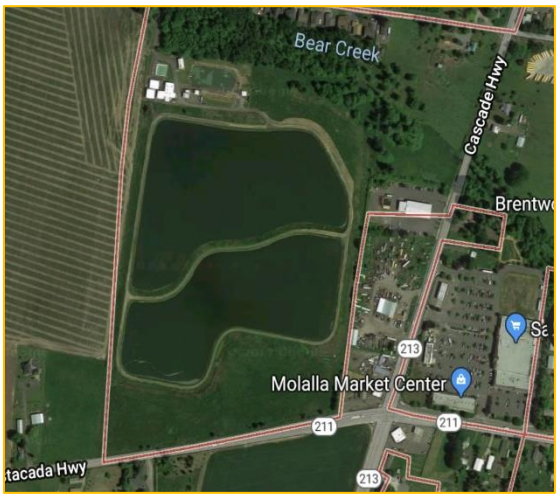
FREQUENTLY ASKED QUESTIONS

Where does sewage 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, located southwest of the City along the Woodburn-Estacada Highway.



Molalla Wastewater Treatment Plant *- Sewage from Molalla homes and businesses is treated at the wastewater treatment plant, located southwest of the City along the Woodburn-Estacada Highway.*

Where does our wastewater go after treatment?

Molalla's wastewater is treated year-round at the City's wastewater plant. Where the treated effluent goes depends on the time of year, as regulated by the City's discharge permit.

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.

Is there a way to recycle our wastewater?

In summer, treated wastewater is recycled to irrigate agricultural fields. Recycling our treated effluent preserves our water resources and keeps effluent out of the Molalla River in the summer when flows in the river are low.

Does the City discharge to the Molalla River?

The City discharges **fully treated effluent** to the river in the winter months and, at times, in the "shoulder season" in the spring and fall. 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 used for irrigation.

When there is a lot of spring or fall rain (during the "shoulder seasons"), the lands used for irrigation become saturated with rain water. In that event, the City stores as much water as possible, then discharges to the river treated effluent that can't be stored. This occurs when Molalla River flows are high, but is not allowed under the current discharge permit. The City is conducting advanced modeling of river flows to better understand the capability of the river to accept treated wastewater during the shoulder season.

What's wrong with the wastewater treatment plant?

Molalla's existing treatment plant is not able to reliably meet permit requirements. The plant also needs more capacity to meet the City's current and future needs. The City is working closely with Oregon Department of Environmental Quality (DEQ) to identify the right path forward before investing in new infrastructure.

There are four main challenges at the wastewater treatment plant.

1. **Leaky sewers -** 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 then has to treat groundwater and stormwater along with wastewater. This problem is referred to as inflow and infiltration (I&I).

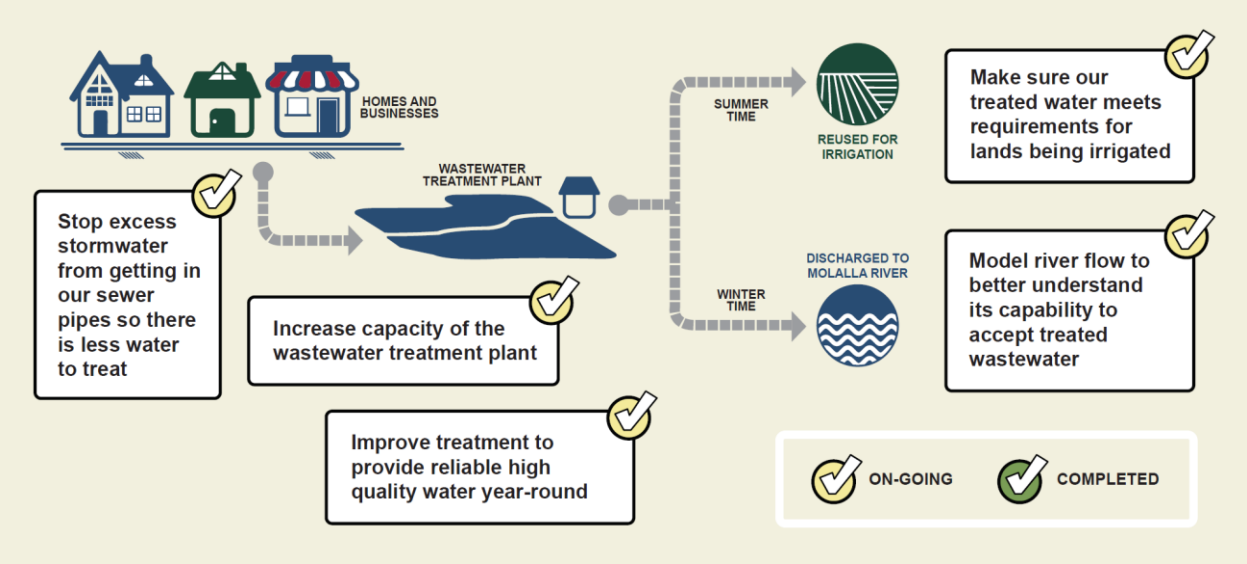
2. **Mismatches between recycled water quality and its use -** In summer, effluent is used for irrigation. The water quality of the effluent (its "class") must be appropriate for the land and crop being irrigated and the level of public access. The City had committed to producing Class A recycled water – beyond the capabilities of the existing plant – and was applying it to lands designated from Class B to Class C.

3. **Permit based on discharge to more-sensitive Bear Creek -** 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 and a greater capability to accept treated effluent – the City's discharge permit was not updated to reflect the change in discharge point.

4. **Treatment plant upgrades -** The existing treatment plant does not function as designed – the treated effluent does not meet the City's discharge permit. The plant also doesn't have enough capacity: Molalla needs to serve 6,000 new residents and associated new businesses by 2040.

How is the City fixing the problems?

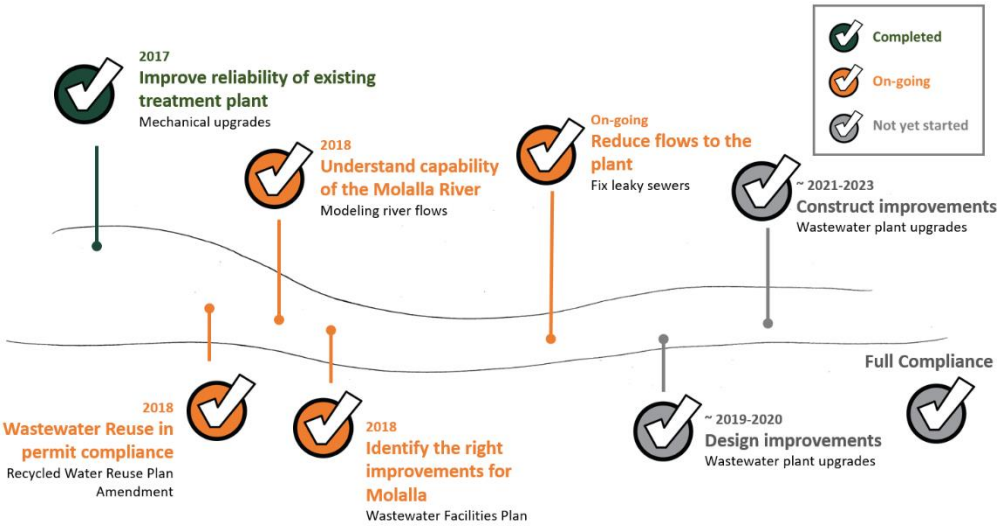
Molalla is taking a multi-pronged approach to develop affordable and reliable improvements that meet the City's long-term needs. The City recently completed the Draft Recycled Water Use Plan Amendment that will bring the City's summer recycling program into compliance. Other components, including a Wastewater Facility and Collection System Master Plan that will identify long-term improvements, are in progress.



Wastewater Treatment Improvements *- Molalla is using a multi-pronged approach to develop affordable, reliable improvements that meet the City's long-term needs.*

When will things be fixed and how can we protect the river today?

Solutions will take four to six years to implement, depending on the extent of needed upgrades. There are many steps along the way. A Wastewater Facility and Collection System Master Plan will detail needed long-term improvements, their cost, and the schedule for design and construction. While long-term improvements are being planned and built, the City is making steady progress improving wastewater system performance. This helps protect water quality in local streams while long-term improvements are being implemented.



Molalla's Pathway to Regulatory Compliance – The City is making steady improvements that help protect water quality in local streams while long-term improvements are being implemented.

Do we have enough capacity for Molalla to grow?

Improvements are needed for two reasons: to meet requirements of the City's discharge permit and to provide needed capacity for growth. Molalla anticipates adding 6,000 new residents and associated new

businesses by 2040. Wastewater treatment plant improvements will include enough capacity to support the planned growth.

Who regulates discharges from the wastewater treatment plant?

The Oregon Department of Environmental Quality (DEQ) regulates and monitors the wastewater treatment plant through a discharge permit. Oregon's rules are based on the federal Clean Water Act and codified in the Oregon Administrative Rules. Some rules apply to all wastewater treatment plants in Oregon; others are based on the specific river or stream where the treatment plant discharges. A treatment plant's discharge requirements are described in its National Pollutant Discharge Elimination System (NPDES) permit.

The City is working closely with DEQ to identify the right path forward for Molalla. The City is committed to keeping customers informed about DEQ's response and plans for the wastewater system improvements, protecting water quality in the Molalla River and maintaining affordability for sewer customers.

Is the City required to make wastewater treatment improvements?

Yes – improvements that allow the City to reliably meet its discharge permit are required under the federal Clean Water Act. The City is currently negotiating Oregon Department of Environmental Quality (DEQ) to agree on a timeline to complete improvements needed to bring the wastewater treatment plant into compliance. Studies underway will identify needed improvements based on the best available science and engineering.

How much will improvements cost? Will customers' rates increase?

Costs are not yet known. The Wastewater Facility and Collection System Master Plan scheduled for completion in 2018 will provide greater detail on specific improvements needed and cost. Rate increases will likely be required but the amount is not known. The City is seeking creative engineering and funding solutions, to keep sewer service affordable for our customers.

Is the sewer system in good condition?

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 then has to treat groundwater and stormwater along with wastewater. This problem is referred to as inflow and infiltration (I&I). The City has budgeted to reduce I&I by replacing aging sewer pipelines and disconnecting cross connections. In 2017, the City invested in a study to identify locations with the highest I&I flows to focus improvements where they will make the biggest difference. These improvements also reduce discharges from the wastewater treatment plant.

Does our wastewater treatment plant remove pharmaceuticals and personal care products?

Every day the average adult uses nine personal care products (like shampoo and sunscreen), as well as prescription and over-the-counter drugs. Many of the products we use end up in the City's wastewater system. Wastewater treatment plants are not designed to remove personal care products and pharmaceuticals. While some products are almost completely eliminated by wastewater treatment plants, others are not affected at all.

Because scientists are using more advanced technology that can detect very tiny amounts of these products in water, very low levels of pharmaceuticals and personal care products are being detected at wastewater treatment plants and in streams. There is no evidence these trace amounts post a risk to human health, but scientists have sometimes found impacts on aquatic organisms and there is on-going international research to better understand potential impacts. Currently, there are no regulations for pharmaceuticals or personal care products in wastewater in the U.S.

The best approach to reducing the amount of pharmaceuticals in the environment is to reduce the amount entering our wastewater. Everyone can do their part by using only what we need and making sure unused medications are not flushed down the toilet. Unused medications can be disposed of through drug take back programs or disposed of at home through a four-step process developed by the Food and Drug Administration (FDA):

1. Mix medicines (do not crush tablets or capsules) with an unpalatable substance such as dirt, kitty litter, or used coffee grounds;
2. Place the mixture in a container such as a sealed plastic bag;
3. Throw the container in your household trash;
4. Scratch out all personal information on the prescription label of your empty pill bottle or empty medicine packaging to make it unreadable, then dispose of the container.

More information on disposal of unwanted medications, including a list of designated collection sites, is available on the Oregon Department of Environmental Quality site at http://www.oregon.gov/deq/Hazards-and-Cleanup/hw/Pages/Pharmaceuticals.aspx

How can I get more information?

More information is available on the Wastewater Improvements page. All available reports and documents are downloadable on the Reports and Documents page.