Bar Screens
Where inorganics are pulled out by screens that have small openings. This is where flushable wipes, dental floss, q-tips, and other things that people flush down the drains.

Grit Column
Large open cylinder that slows the water and allows coffee grounds, rocks, dirt, and egg shells to settle out. Grit is put into a dumpster and sent to landfill.

Aeration Basin
Where the microbiology removes the waste that still exists in the water. We add oxygen to the water to encourage the microbes to eat extra phosphorous to make fertilizer. After the microbes have eaten all they can, we put them in digesters where they make methane to generate electricity.

Secondary Clarifiers
Large (gallon-sized) round tank where the microbes are settled out to be reused to treat more water. To control the population some microbes are removed.

Ultraviolet Disinfection
Ultraviolet light is used to kill bacteria to protect humans and other living creatures. UV disinfection is a chemical-free way to treat water but is also expensive. Larger treatment facilities often use chemical compounds for disinfection because the cost would be too high to use UV.

Vertical Flow Wetlands
This is where rocks absorb ammonia and other bacteria grow on it to eat it. This is done to protect the river and aquatic life.

Healing Garden
Waterfalls aerate the water, oxygen is reintroduced to water for plants and wildlife.

Natural Treatment System (NTS)
Plants absorb nutrients and cool the water by using transpiration. The plants can remove contaminates that the bacteria cannot remove like copper and other heavy metals. Water also has time to cool overnight before returning to the Tualatin River.

For more information: 503.681.3600

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FOREST GROVE WATER RESOURCE RECOVERY FACILITY IMPROVEMENT PROJECTS

A series of construction projects at the Forest Grove Facility, adjacent to Fernhill, will accommodate community growth and improve system reliability. Fernhill visitors may experience increased construction traffic and noise during this time.

1. Reuse and Electrical Complex: A new building will house the electrical feed for the projects listed below, as well as office and meeting space. Construction is expected to be complete by spring 2021.

2. Secondary Clarifier: A new 120-ft diameter clarifier will be constructed on the east side of the facility, adjacent to the Fernhill border. Construction is expected to be complete by summer 2021.

3. Ultraviolet Disinfection/Effluent Pump Station (UV/EPS): A new disinfection system and pumping station will replace aging and undersized equipment. Construction is expected to be complete in summer/fall 2022.

4. Reuse: In conjunction with the UV/EPS project, improvements will be made to the holding ponds behind the Fernhill Visitor and Volunteer buildings. Reuse water from the treatment process will be distributed to local agricultural fields, and later to other irrigation customers. Construction is expected to be complete in spring/summer of 2023.

5. Fernhill Amenities: A new nature-based play area will engage Fernhill’s youngest visitors in unstructured and imaginative play and a new viewing platform will offer an accessible place to observe wildlife. Construction of the nature-based play area is expected to be complete in summer/fall 2021, viewing platform construction should be complete in spring 2022.