

Water Resources & Sustainability (WRS)

November 2024

PERSONNEL UPDATES & ANNIVERSARIES

Cory Hale, WRS Sewer Field Lead 11/1/2013, 11 years

Tim Bell, WRS Maintenance Technician I 11/1/2022, 2 years

Amy Morris, WRS Maintenance Technician I 11/16/2023, 1 year

Justin Stewart, WRS Maintenance Technician I 11/20/2023, 1 year

Street Sweeping and Leaf Litter Collection



City street sweepers.

The fall season, signaled by less daylight and cooler temperatures, causes tree leaves to change, creating a wonderland of vibrant colors for a very short time as the trees prepare to shed their leaves. Once the cycle is complete, the fallen leaves, commonly referred to as leaf litter, can cause storm drains to plug. These plugged drains lead to localized flooding which can impact water quality in our rivers, creeks, and streams at a critical time when salmon are returning to spawn. With leaf season upon us, the Stormwater Crew is happy to announce a new addition to the fleet to improve

leaf litter collection and removal. Tumwater has added a new street sweeper and operator to the lineup improving the City's response to the leaf season. Last year the City's sweepers collected 427 tons of leaf litter between October 1 and December 31, which is considered the street sweeper's busiest time. Next time you see the sweeper passing by, give them a wave to let them know you appreciate their efforts.

But remember, the City does *not*want residents to intentionally put leaves in the road given the lack of equipment and resources and the cost of disposal. Please compost your leaves, use them as winter cover in your landscape, or get them composted off-site by placing leaves in LeMay's/Pacific Disposals blue yard waste bins.

Collaboration for Better Storm Treatment



WRS stormwater staff meet with Dept of Ecology Management Team members.

WRS stormwater staff hosted 24 members from the Department of Ecology's statewide Project Management Team on October 2. The group discussed Stormwater Management Action Planning (SMAP) efforts that are required through the National Pollutant Discharge Elimination System Permit, the broad permit covering stormwater management efforts affecting most, if not all, departments at the City. One of the priorities that came from the SMAP

process was to improve stormwater treatment and conveyance in the Beehive Industrial Area along Joppa and Lambskin streets. WRS recently received a \$220,000 grant from Ecology to complete designs and acquire permits for a series of stormwater treatment facilities that should address this priority. Ecology staff was eager to see where this project is happening and what the conditions are like before the new stormwater treatment facilities are built.

Green Team Annual Report



Pilot solar EV charging station installed at Pioneer Park.

In September, the Green Team approved the 2023 Green Team Annual Report. Here are some of the findings:

- The City's vehicle fleet is made up of 13 fully electric vehicles, 16 hybrids, and 148 gasoline/diesel vehicles.
- In 2023, the City tested renewable diesel in its street sweeper successfully. Now in 2024, the underground diesel storage tanks for fleet vehicle fueling have transitioned to be 100% renewable diesel.
- In 2023, electricity consumption in City buildings rose 16.4 percent and natural gas

- consumption in City buildings rose 4.95 percent.
- Solar installed on City facilities generated 28,994 kWh of electricity.
- Six employees signed up to participate in the Commute Trip Reduction program by carpooling, biking, walking, or taking transit to work.
- Three employees utilized the Commute Trip Reduction incentive to purchase new electric vehicles.
- City operations used 15.25% more potable water in 2023 than our baseline year.
- The golf course used 55 million gallons of reclaimed water to irrigate the golf course, reducing the demand for potable water and supporting instream flows for salmon.
- The City produced an estimated 331,185 pounds of solid waste and we're currently recycling or composting about 25% of our solid waste by weight.
- All of these activities combined means that City operations added an estimated 3,821 metric tons of carbon pollution into the atmosphere in 2023.

While we are making progress on a lot of our goals, there is room for improvement. The Green Team continues to evaluate our progress and prepare recommendations to get back on track where needed.

2024 Summer Water Production

With fall setting in, now is the time to take a look at summer's water use. Every year, WRS diligently tracks daily water production for the City. If production exceeds predetermined triggers, water conservation measures are enacted. Depending on the stage, this can be simply voluntary reduction in water use,

mandatory restrictions, or full emergency curtailment of some uses.

A stage is triggered when the daily water demand nears our total daily water production. There are four stages, with Stage 1 calling only for voluntary water use reductions to help regulate our daily usage. Tumwater has reached only Stage 1 since 2015, including this year. Even as summers have become hotter and drier, the City has avoided more stringent restrictions on water usage due to the voluntary reductions by consumers and the great work on water loss reduction by City water crews. Our peak water production day was July 11th at 6.3 million gallons. Compare this to an average day in February at 2.4 million gallons. With future conservation efforts, the City hopes to reduce summer irrigation uses in the City by 20% (1.2 million gallons a day) within the next 10 years. Most irrigation uses in the City are for watering lawns.