

MAY 2020

WATER WISE NEWSLETTER

CITY OF KEIZER | Public Works Department
Environmental & Technical Division



SPRING INTO GREEN LAWN CARE

As the sun comes out and the weather starts to get warmer, we often don't think about stormwater. But spring and summer are actually the times when our actions outside can impact our water quality the most. Here are some tips that could help protect our water resources:

Fertilizing: Excess fertilizers can run off lawns and build up in our waterways causing nutrient loading. Increased nutrients often leads to algal blooms, increased water temperature and fish die offs.

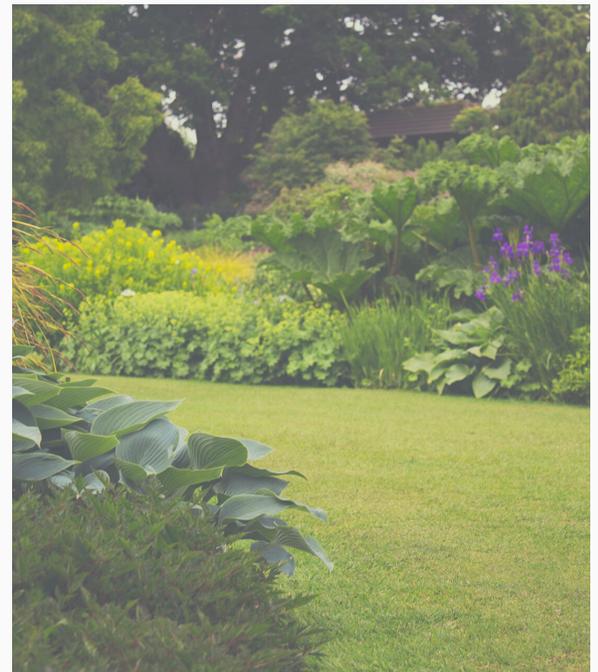
- Reduce your lawn size by planting native plants or raised beds
- Test your soil to find what nutrients it actually needs
- Leave grass clippings on your lawn as a natural fertilizer
- Apply compost instead of synthetic
- If applying chemical fertilizer, select OMRI/water-safe labeled products and apply according to label

Pesticides & Herbicides: Pesticides and herbicides can be detected at an alarming rate in the Claggett Creek and Willamette River. Help reduce their impacts by using them sparingly or choosing alternatives.

- Try reducing your lawn size by planting native plants to reduce the growth of weeds & need for maintenance
- Select OMRI, water-safe or natural products whenever possible
- Never apply before it rains or while it's windy
- Always read and apply according to the label

IN THIS ISSUE, WE ARE COVERING:

1. GREEN LAWN CARE
2. OUTREACH DURING A PANDEMIC
3. GIS: VIRTUAL STREAM HERO
4. EMPLOYEE SPOTLIGHT



OUTREACH DURING A PANDEMIC

These past few months have been a whirlwind of change for most of us. COVID-19 has challenged us in many ways and here at the City, we have seen remarkable flexibility, creativity and ingenuity come as a result.

As an example, this spring, the Environmental & Technical Division had 4 large-scale outreach events cancelled. One of which was the 50th Earth Day Celebration hosted by Marion County. This event usually has around 1,500 attendees so it would have been great opportunity to connect with our community about water quality issues. However, when the event was cancelled, instead of taking the loss, our team got to work to create something brand new, The Mid-Willamette Earth Challenge.

Our team brought together organizations from around the Willamette Valley to create over 30 different environment-focused activities and challenges for individuals, students and families to complete from home. The Salem-Keizer Education Foundation and the Salem-Keizer School District even shared with their families as curriculum while the students are home.

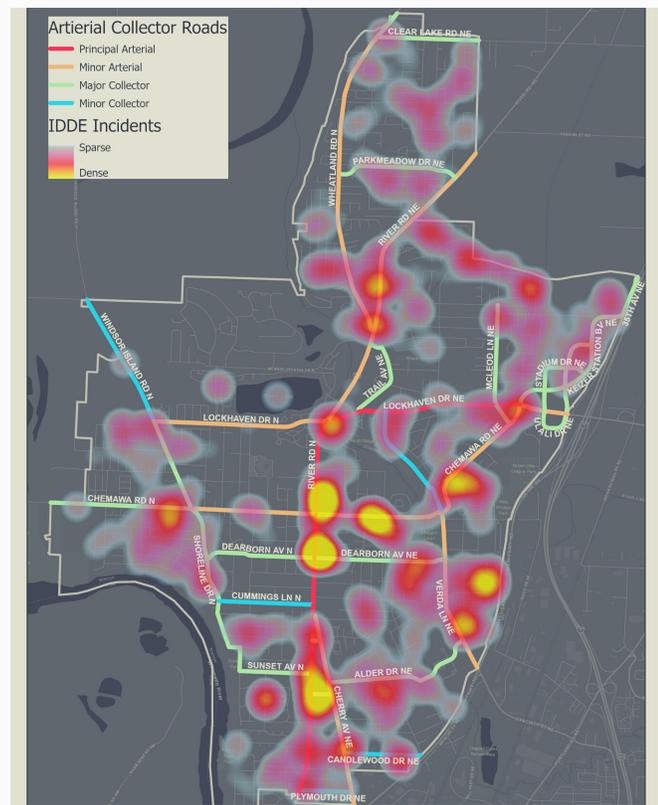
Here are some of the highlights:

- 1520 minutes of outdoor time was logged
- 577 gallons of water was saved
- 675 minutes of environmental learning took place
- 10 trees were planted

GIS: VIRTUAL STREAM HERO

You may have heard that the City recently added a GIS Technician to the Environmental & Technical Division. Now, you may be thinking, "What the heck is GIS?" GIS stands for Geographic Information Systems and while many people think that GIS is just maps, it is much more than that. In fact, for the Environmental & Technical Division, GIS is our virtual stream hero.

The City is responsible for implementing a program that detects and eliminates illicit discharges and prevents anything other than stormwater from entering our drainage system. We could simply set up a hot line, respond to reports and clean up non-stormwater discharges but with our virtual stream hero, we can actually use data to predict where future illicit discharges could occur. Here is how it works:



GIS CONT.

1. Using mobile data collection, staff capture the location and details of reported illicit discharges
2. Staff become notified that there is a problem, then respond, collecting even more information about the source or cause of the incident
3. Overtime, as staff collect more data, Sue Ranseen, our GIS Tech is able analyze this information to reveal trends or illicit discharge hot spots
4. Then by cross-referencing with other data layers like zoning or waterway maps, they are able to identify specific land uses or neighborhoods with a high risk of pollution - effectively predicting the future.

By collecting and analyzing data, we are doing much more than creating maps. We are able to make informed decisions about where and when we should provide education and outreach; we can better train our staff to deal with common spills and pollution; and we can prioritize inspections and maintenance in known problem areas. All of these actions help to protect our streams from harmful pollution. GIS is a powerful tool and we encourage you to connect with Sue (they/theirs) to find out what GIS could be doing for you!

(ranseens@keizer.org)

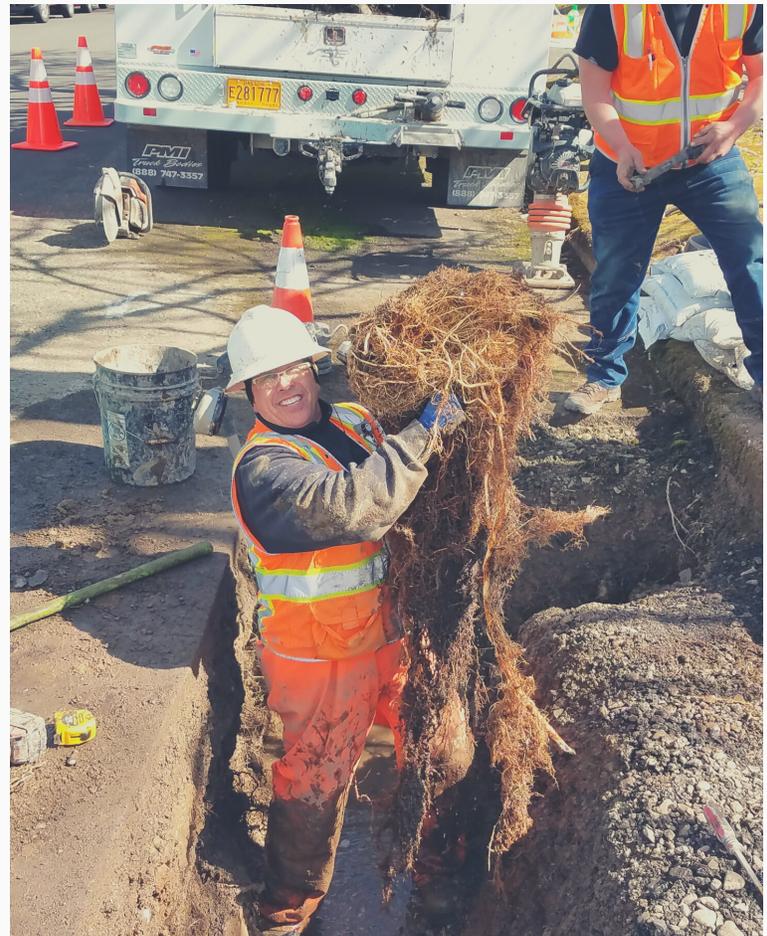
EMPLOYEE SPOTLIGHT

Stormwater Division is Rooted in Teamwork!

A critical component of stormwater management is operation and maintenance of the City's stormwater conveyance infrastructure. This incredible responsibility falls in the capable hands of our Stormwater Division. The Stormwater Division is headed up by Mike Griffin who oversees a small but highly effective team of stormwater experts: Lyle Bell, Arturo Madrid and Juan Aleman. Working together year round, these guys maintain a remarkable number of stormwater assets.

On March 17th, this team took on a huge mass of roots that had worked its way into the storm line on Latona Drive NE. Roots like the one shown in the photo can cause big problems for the City and for residents alike. If left unchecked, roots that wedge their way into pipe joints or cracks, can grow so large that they can completely block the flow of water in the line causing overflows, backups and damage the pipe, causing expensive repairs. Even smaller root masses can trap sediment and debris that can slow flow and build into bigger blockages. When water flowing through the storm line is slowed or blocked by root masses, it causes it to back up which often leads to localized flooding on the roadways or private property. Removing roots is not an easy task, but this team works together to get the job done! Thanks for keeping our system in tip-top shape guys!

The Environmental & Technical team works with so many different groups here at Keizer. Thank you to everyone for their help!



Arturo Madrid poses with his prize - a massive root mass he and his team removed from a storm line on Latona Drive NE this spring.

