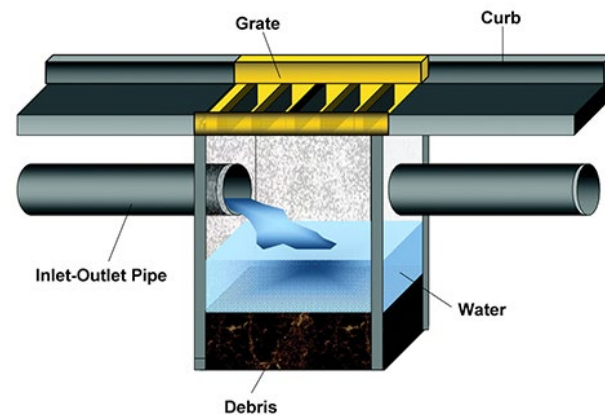


# Stormwater

We have gone from our second summer to fall very quickly this year. Our summer, from June to August, we only saw 0.65-inches of precipitation. The end of September we have had more than 3.12-inches (as of September 29<sup>th</sup> at 8am) most of which all fell starting September 23<sup>rd</sup>. September 2023 exceeds our average for the month of September by over 1-inch of precipitation. With the rains back you are starting to see the City's stormwater system in action once again.

## How does Florence's Stormwater System Work?

Larger Oregon cities such as Portland and Eugene have been mandated for a number of years to implement stormwater management in compliance with the federal Clean Water Act. However, the city of Florence has chosen to implement stormwater management proactively. The importance of stormwater management in Florence is highlighted by the region's unique hydrology, climate, and geology that calls for unique design and construction techniques.



What is Stormwater Management? In simple terms, stormwater management includes the planning, design, construction, regulation, improvement, repair, maintenance, and operation of facilities and programs relating to flood control, erosion prevention, conservation, and water quality utilizing the construction of facilities or structures to control the quantity and quality of stormwater.

Why is stormwater management important in Florence? There are several important reasons. First and foremost, the protection of the aquifer, our drinking water supply for the community. As stormwater percolates into the North Florence Dunal Aquifer, a federally protected sole source aquifer, stormwater pollutants can directly infiltrate into the City's aquifer threatening the City's only feasible drinking water source.



Secondly, stormwater (also known as surface water runoff) runoff generally drains to Munsel Creek and the Siuslaw River which contains Federally Protected and threatened Coho Salmon. Common pollutants found in stormwater, such as oils, greases, hydrocarbons, and metals such as copper and zinc (from automotive brakes) are highly toxic to aquatic species. To help mitigate the impacts of hydrocarbons and metals, the City performs street sweeping operations with a regenerative air machine to sweep and vacuum up the dust, dirt, sand, metals and hydrocarbons from the street, typically along the gutter line where this material typically is deposited, on a monthly basis throughout town. The exception is the Old Town area, which receives weekly street sweeping to help maintain a healthy, safe, and attractive environment for residents

and visitors. We are also out regularly after storm events, but with 78 lane miles of roadways, it takes many days to sweep the entire City following storm events.

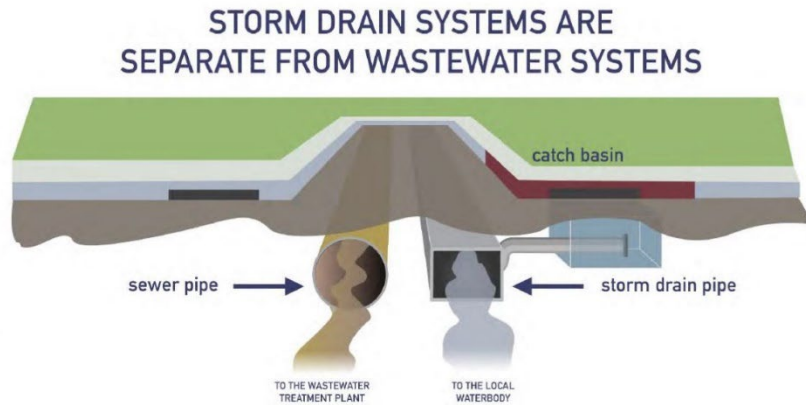
Another reason for stormwater management is to reduce localized flood risk to public and private property. Today's modern stormwater management reduces the risks to public and private property by requiring new developments to implement stormwater Best Management Practices (BMP's) which reduces environmental impacts and lessens costs to the public to construct and maintain the City's stormwater conveyance system.

Since 2006, all new developments large and small have had to implement stormwater BMP's to reduce the potential damage to properties during flooding events. Through detention and retention of stormwater, pre-development hydrology is mimicked thus reducing risks of flooding and bank erosion to downstream properties. Additionally, stormwater treatment is included to treat the stormwater before it is allowed to infiltrate into the ground or conveyed offsite to a drainage system.

While stormwater management has yet to be mandated for small communities such as Florence, federal oversight and regulation continues to develop. Proactively managing stormwater reduces potential future liability and costs to retrofit stormwater treatment systems within the city. It also demonstrates cooperation with the intent of the Clean Water Act and federal regulations. The end result is a livable community where everyone benefits from reduced flooding, cleaner waterways, and pure drinking water.

Eventually, as the City continues to grow, these types of stormwater facilities will be constructed in areas that relies on the old standard of stormwater from buildings, roads and other hard surfaces conveying the runoff to piped systems that discharge directly to seasonal creeks, Munsel Creek or to the Siuslaw River. In our older areas of the community this can mean that trash and pollutants can be picked up along the way and find their way into the natural environment. We all need to do our part by properly disposing of litter, trash and keeping our vehicles and equipment properly serviced and leak free. That is why it's important to keep trash, motor oil, pesticides, and other chemicals from entering the storm

drain – everything that goes in comes out in our waterways. Polluted water is harmful to fish, wildlife, and humans.



### **What About the Drains in My House?**

The drains in your house are part of a different system, the wastewater system. Dirty water from inside your home flows into underground pipes that are connected to the City wastewater treatment plant. The water from your home is cleaned before it is released into the river.

### **How can I help?**

**Keeping your storm water on your property.** While our storm system is very good at moving water, it is unable to keep small pollutants such as chemicals out of the river. Creating dry wells at the end of your gutter lines or incorporating a rain garden in your landscaping helps to provide the water a place to pool so it can over time infiltrate back into the soil. Sand and soil are one of the best and simplest ways to filter out pollutants like, de-mosser off roofs, fertilizers off yards, and grease/oil off driveways.



**Keeping storm drains around your neighborhood clear.** As we enter the fall season, it is also time for all of us to do our part and keep leaves and fir/pine needles from being raked into the street. Florence's storm drains are just for stormwater runoff and to prevent flooding. If drains get clogged with fallen leaves, pine needles, or other debris, it can lead to dangerous ponding along city streets and intersections. Florence Public Works crews work hard to keep the street clean and swept. But we can't sweep the whole town before a big storm. That's why we're asking you to adopt storm drains in your neighborhoods to keep them free and clear of debris.

Follow these tips for clearing stormwater catch basins:



- Use a rake, shovel, or broom. Don't use your hands.
- Wear gloves. Be careful of sharp objects!
- Wear reflective clothing so people driving can see you. Watch out for traffic!
- Only clear catch basins (drains) you can reach from the sidewalk. Don't stand in the street and don't clear catch basins that are in the middle of a street.
- Clear catch basins before the rain, whenever possible.
- Clear 10 feet on both approaches to the catch basin.
- Watch for standing water to avoid slipping or stepping on sharp objects.
- Make sure adults are supervising if children are helping.
- Clear surface debris only. Call Florence Public Works 541-997-4106 if the drain is still clogged after removing surface debris.
- Never lift stormwater catch basin grates. They are very heavy

and difficult to put back in place.

With your help, we can keep the streams, river, and ocean a cleaner place.

If you have any questions on our street sweeping program you can call 541-997-4106, or email [publicworks@ci.florence.or.us](mailto:publicworks@ci.florence.or.us).

Links and more information on storm water management is available on the City's website <https://www.ci.florence.or.us/publicworks/stormwater-division>.

Link to Street Sweeping Map

[https://www.ci.florence.or.us/sites/default/files/fileattachments/public\\_works/page/810/streetsweepingmap.pdf](https://www.ci.florence.or.us/sites/default/files/fileattachments/public_works/page/810/streetsweepingmap.pdf)