

# Street to Stream:

Understanding Stormwater's Path and Our Shared Role to Protect It.



## Follow the Flow

Every drop of water that flows off our streets has a destination. Norfolk manages runoff through a system of drains, pipes and pumps to prevent flooding and protect waterways.

Here's how the city uses a multi-pronged approach that includes infrastructure improvements, pollution reduction and ongoing maintenance to manage stormwater and improve water quality.

### 1 Storm Drain/Drop Inlet

Storm drains and drop inlets collect excess stormwater and melted snow from streets to prevent flooding. Unlike sanitary sewers that carry household wastewater to a sewage treatment plant, these drains direct water away from the road and into local waterways such as rivers or retention ponds.

### 2 Ditch

Ditches provide extra storage and guide stormwater through the open channels towards larger bodies of water, detention areas or retention ponds.

By swiftly directing excess water away from road surfaces and developed areas, they reduce soil erosion and significantly mitigate the risk of flooding and the potential for property damage.

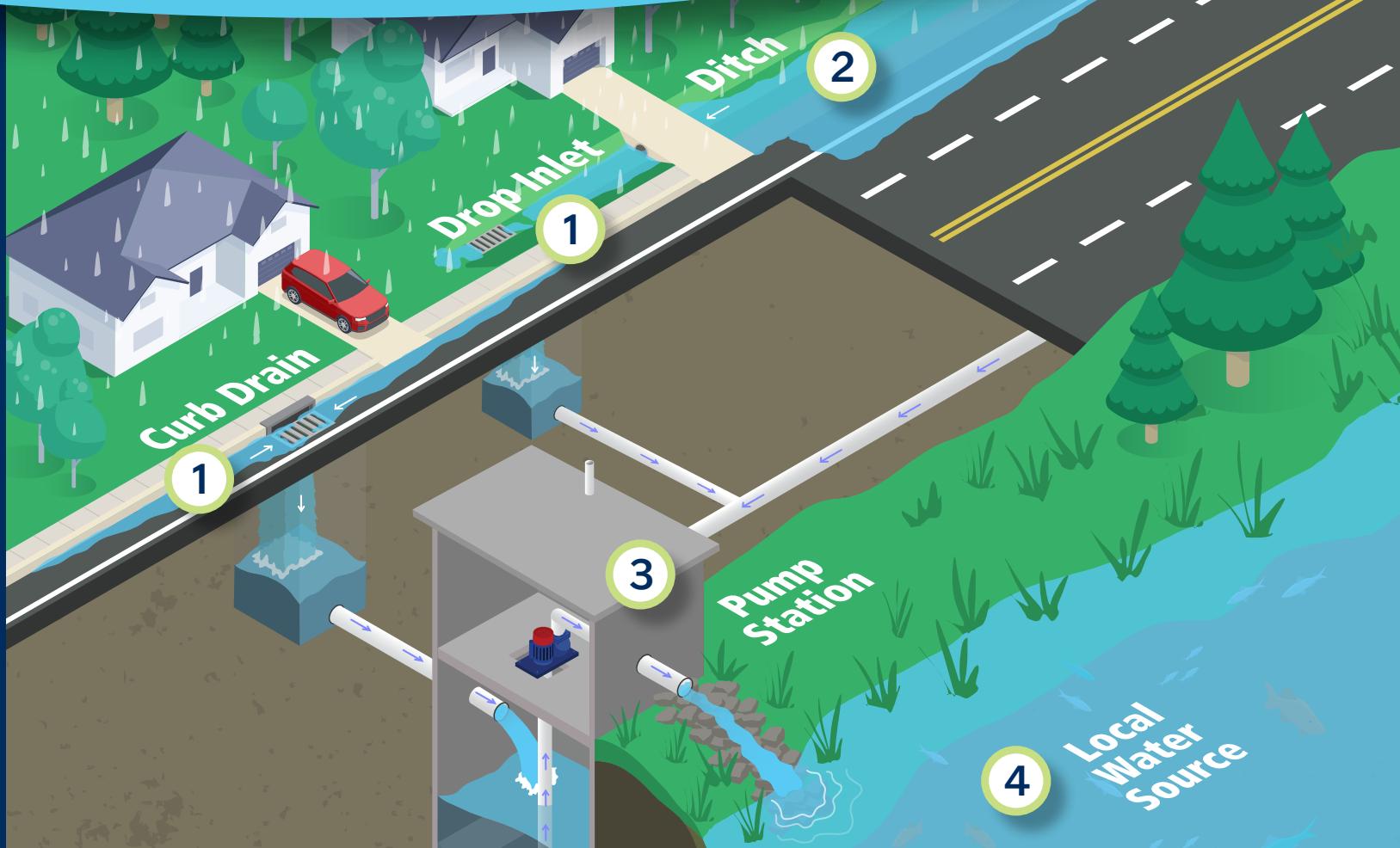
### 3 Pump Station

Stormwater pump stations prevent flooding by using force to push water from the streets and underpasses, directing it out of the city to nearby rivers. They also prevent backflow into stormwater pipes. Crews keep pump stations clear and functioning by regularly cleaning out built-up trash, sand and dirt to maintain water flow and protect water quality.

### 4 Local Waterway

The stormwater system works to remove excess water from streets to a local water source. This can be a stream, river or pond. Crews with the Stormwater Division prevent trash, pollutants and debris from entering the water source by performing routine maintenance, street sweeping and other best management practices to maintain the water quality of our local water sources.

# How Stormwater Moves Through Our City



## Different Causes of Flooding

### Why Norfolk Floods

Many areas of Norfolk were once creeks and rivers. They were filled in as the land was developed. Today, many of those areas flood during coastal storms and heavy rainfall.

In addition, sea levels are rising faster in Norfolk than anywhere else on the East Coast, driven by a combination of warming oceans and sinking land in the region. Understanding the different causes of flooding can help with stormwater management.

### Tidal Flooding

Along some land areas that are low in elevation, the city experiences nuisance type or minor flooding during a normal astronomically high tide, even on a beautiful, sunny day.

### Precipitation Flooding

Precipitation flooding can come from sudden and brief heavy downpours that overwhelm drainage systems or several days of steady rainfall that saturate the ground.

### Compound Flooding

Flooding can be significantly worse when tidal flooding is combined with rainfall events, referred to as compound flooding.

### Coastal Flooding/Storm Surge

Storm surge is an abnormal and dangerous rise of water pushed onto the shore by strong winds from a hurricane or tropical storm.

## POLLUTANTS



## Stormwater is more than just rain.

As it flows across streets, lawns and sidewalks, it picks up pollutants such as trash, pet waste, fertilizer and pesticides, and vehicle fluid, carrying them into our waterways.

That's why Norfolk's Stormwater Division works year-round, rain or shine, to manage stormwater, reduce flooding and keep our waterways clean by removing harmful debris.



# Do Your Part to Keep Our City Clean

Stormwater management isn't just the city's responsibility. It starts with each of us. From what we do with our pet's poop to how we care for our lawns and vehicles; our everyday choices can make an impact. By taking a few simple steps, residents can help prevent pollution, reduce flooding and protect Norfolk's rivers and streams.

## Stormwater Fees Help Fund Stormwater Management

Stormwater fees fund essential services that manage the collection, conveyance, and discharge of stormwater runoff. These services help reduce flooding caused by heavy precipitation, protect infrastructure, and prevent pollutants from entering local waterways—safeguarding water quality and the environment.

## Prepare for Street Sweeping Day

Litter and debris left on streets can wash into storm drains during rain, clogging pipes and causing flooding. Norfolk's street sweeping program prevents this by removing debris before it reaches drains, ensuring water flows properly. Stormwater systems capture runoff from impervious surfaces like roads or driveways, channeling it through pipes and retention areas before pumps and outfalls move it safely to rivers, bays, or retention basins, reducing flooding in low-lying neighborhoods.

Most Norfolk neighborhoods with curbs and gutters are swept monthly.

## TIPS

Visit [www.norfolk.gov/streetsweeping](http://www.norfolk.gov/streetsweeping) to learn more.

## Here's How You Can Help:

- Clean the curb between scheduled visits to keep trash and debris out of waterways.
- Move vehicles on scheduled sweeping days.
- Keep leaves, grass and debris out of the street and storm drains.
- Clear large limbs or debris from curb lines.
- Mulch, mow or pick up leaves and grass clippings.
- Cut grass and clear trash from ditches on your property.
- Never dump or throw anything into ditches or streams.
- Install rain barrels to capture rainwater for other purposes, such as watering gardens.



## Need support or have questions?

Contact Public Works at 757-823-4000

Norfolk Cares: [www.norfolk.gov/norfolkcares](http://www.norfolk.gov/norfolkcares)

