



## Stormwater Management

When rainwater falls from the sky, its journey begins. It runs off surfaces like rooftops and streets, carrying pollutants into storm drains. From there, the water can take two paths, depending on the system in place.



A **combined** sewer system collects both sewage and stormwater in a single pipe, which can lead to combined sewer overflows during heavy rain. A retention treatment facility helps manage these overflows by temporarily storing and treating, if needed, the excess water before releasing it.

A **separated** sewer system has two distinct pipes: one for sewage and one for stormwater. This prevents the mixing of wastewater and rainwater, reducing the risk of combined sewer overflows. The sewage is treated separately at a facility, while stormwater is directed to waterways.

What is stormwater and runoff?
Water from precipitation like rain,
hail, and snowmelt that flows over
land and surfaces and cannot be
absorbed into the ground.

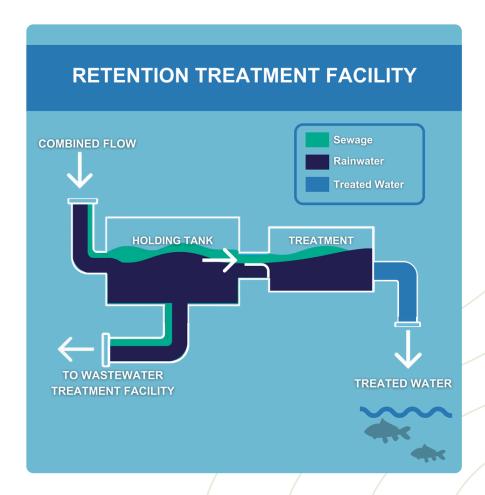


The George W. Kuhn retention treatment facility is one of the largest facilities of its kind in the country, serving 14 communities in southeast Oakland County. It's a crucial part of stormwater management in the area, helping to protect the environment and public health by treating stormwater and sanitary flow during intense storms. The basin stretches two miles long underground and has the ability to hold 124 million gallons of combined stormwater and sewage.

The facility is only active during heavy rains, 97% of the year all flow is sent to a Great Lakes Water Authority water resource recovery facility for processing. On average, eight times a year, the facility has to fully treat flow on its own.

The treated water is skimmed, settled and disinfected with chlorine. We store 150,000 gallons of chlorine onsite to ensure the water we discharge is safe for the public health and can be used for fishing, swimming, and recreation.

All flow processed at this facility meets the State of Michigan water quality standards. The water that leaves the GWK is treated and is cleaner than the receiving river it enters.



## **Communities Served**

- Berkley
- Beverly Hills
- Birmingham
- Clawson
- Ferndale
- Hazel Park
- Huntington Woods
- Madison Heights
- Oak Park
- Pleasant Ridge
- Royal Oak
- Royal Oak Township
- Southfield
- Troy

Discover Where the Water Goes:

