

OAKLAND COUNTY PROTECTS WATERWAYS WITH TREATMENT FACILITY

Right under the I-75 overpass at 12 Mile Road in Madison Heights and extending for two miles to Dequindre Road at the border between Oakland and Macomb Counties, is an underground tunnel the size of a four-lane highway. The tunnel, constructed in the 1970s and recently expanded and updated with a \$144 million investment, is part of an elaborate system that most people don't even know exists. The building east of I-75 is the George W. Kuhn Retention Treatment Basin facility. It's one of 23 similar facilities in southeast Michigan. Despite its obscurity, it just happens to be the nation's largest.

This facility is designed to capture and treat combined rainwater and wastewater from 14 southeast Oakland County municipalities. The facility comes to life during heavy rains where the excess flow is sent to the underground tunnel that acts as a treatment basin once the sewers are full. A series of giant screens first filter out debris, then liquid chlorine is added to disinfect the flow while it's stored in the basin. At the same time, the basin is being emptied by a system of pumps that send the treated sewage to a Great Lakes Water Authority's facility for further treatment.

On a rare occasion when the facility needs to send treated water to the Red Run Drain, it works to release clean water into the river and protect basements from backups. For the past 25 years Oakland County has been an industry leader in protecting the public health and environment.

The latest system improvement was realized in 2023 through a partnership with the Michigan Department of Transportation. A four-mile-long, 14-foot stormwater storage tunnel was constructed under I-75 as part of the recently completed \$1.7 billion highway improvement project. This tunnel adds an additional 25 million gallons of storage for a total capacity of nearly 150 million gallons.

It's no secret that highway rainwater runoff is extremely dirty and carries many pollutants from oil and vehicle fluids to salt. During heavy rains or when snow is melting, these fluids and other chemicals, can drain into local waterways leading to the Clinton River and eventually into Lake St. Clair. To prevent that, the WRC engineering staff secured design modifications to the highway drainage system so pollutant-loaded highway runoff is sent directly to the treatment facility instead of surface waters.

Despite our investments and successes, Macomb County critics claim that additional storage capacity is needed in Oakland County. This would cost Oakland County residents billions of dollars, without any measurable improvement to water quality. It would also put homes at risk of basement backups. Michigan's Department of Environment, Great Lakes, and Energy has issued a lengthy report detailing improvements needed in Macomb County that would actually address its water quality concerns, including eliminating its failing septic systems.

