

What is a watershed?

A watershed is an area of land from which all water drains into a shared body of water, such as a river, lake or the ocean. When it rains or snows, some water seeps into the ground while the rest flows downhill carrying soil, pollutants, and other materials into our waterways. In urban areas, because we have more concrete, roofs, and roads (aka impervious surfaces), less water is able to seep into the ground and more becomes runoff. This runoff can then cause problems like flooding and pollution which makes reducing and managing it important tasks. Watersheds are important because they provide drinking water, water for recreation and irrigation, as well as food and water for plants and animals. (NEEF)

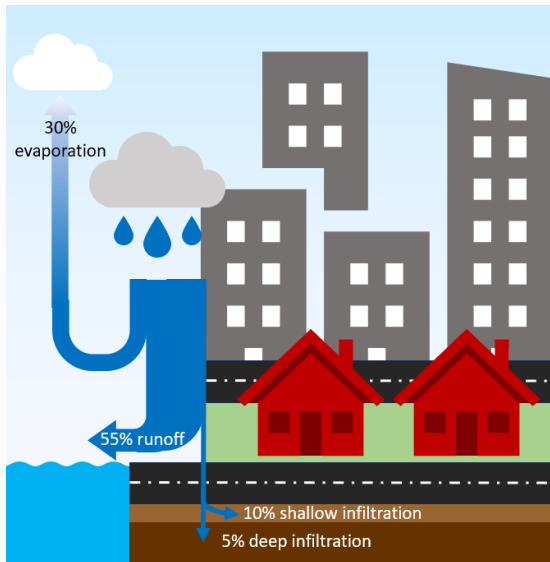


Figure 2. Watershed of an Urban Environment

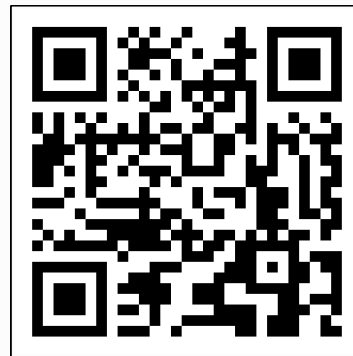


EASTSIDE
COMMUNITY
NETWORK



WAYNE STATE
College of Engineering

Do you live in the targeted area? Then get involved in watershed planning by scanning the QR below. Sign up for newsletter updates on the Detroit River Watershed Management Plan and stay informed or get involved by becoming a Resident Watershed Planner!



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY



This project was funded by the Michigan Department of Environment, Great Lakes, and Energy and the United States Environmental Protection Agency's Great Lakes Restoration Initiative.



Detroit River Watershed Management Plan

What is it and how will it help us?

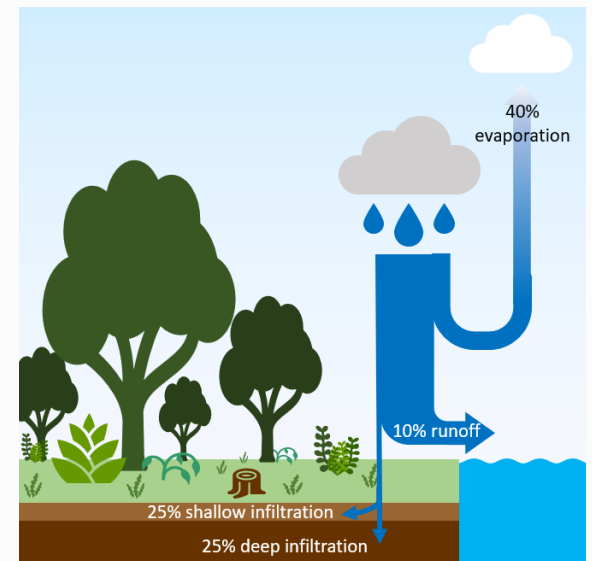


Figure 1. Watershed of a Natural Environment

What watershed is Detroit in?

In Detroit, we are part of the broader Great Lakes Basin, with 75% of water in the Detroit River coming from Lake Huron (EPA). Our surface water runoff flows into Lake St. Clair, the Detroit River, and the Rouge River. We are unique in Detroit for 3 main reasons:

1. We have an international watershed, Detroit River is shared with Canada.
2. Water, which used to flow in creeks and streams is now underground in sewer pipes due to urban development.
3. Nearly 3,000 miles of sewer pipes transport both stormwater runoff and household sewer water for treatment. If the system is overloaded, like during a rainstorm, some of this goes directly into the river.

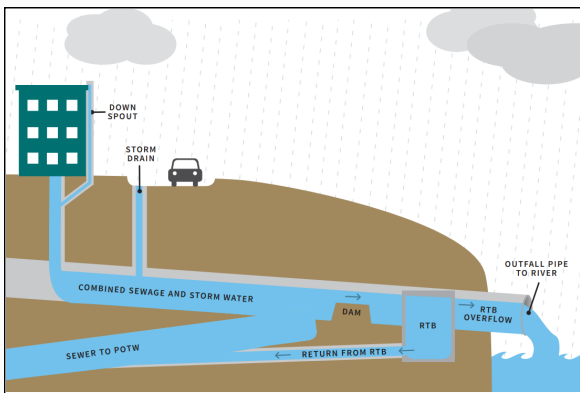


Figure 3. Combined Sewer Overflows during a rain storm (EGLE What You Need to Know about Combined Sewer Overflows and Retention Treatment Basins)

What is a watershed management plan?

A watershed management plan (WMP) is a tool that can be used to help improve water quality as well as prevent further problems. It identifies the water quality issues and sources of pollution, describes actions that can be taken to solve such issues, and outlines a way to track progress and identify successful actions. A WMP can be especially helpful in areas like the eastside of Detroit, where industrial pollution and raw sewage overflows threaten the quality of the water needed for both our health and recreation. (EPA)

Why do we need one?

1. Both Lake St. Clair and the Rouge Rivers have WMPs, but there is not one that covers the unique relationship to water that eastside communities along the Detroit River have. This WMP will allow us to identify localized solutions to help protect residents from larger system failures “upstream.”
2. We are creating a distinctly urban plan that not only addresses the health of the Detroit River, but also the sewer and stormwater infrastructure that influences our communities. By recognizing our unique situation and combining approaches, we can create a “sewershed” management plan that addresses both the social and environmental issues we face.

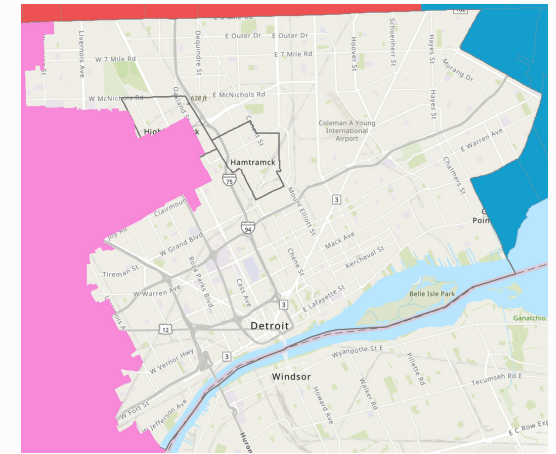


Figure 4. Map of targeted planning area

How will it help us?

1. Having a watershed management plan opens us up to additional funding sources and advocacy tools to help address water quality and infrastructure issues.
2. A WMP will help build knowledge and relationships between community members and technical experts, ultimately increasing our capacity to engage with governments and utilities on important issues regarding water quality and infrastructure.
3. Climate change is already having an impact on the eastside, with an increase in severe rain storms and flooding disasters. It is important that we act now and as holistically as possible. The WMP could be a tool in our climate resiliency toolbox.