

River Rouge River

Community Detroit, Michigan

River Issues

The Rouge River, deemed one of the most polluted rivers in the country in the 1980s, has improved greatly since it became the subject of a massive federally supported cleanup in the early 1990s. As the effects of years of dumping industrial waste and untreated sewage into the river are being addressed, dissolved oxygen levels have begun to rise in even some of the most industrialized portions of the river. Storm water run off is now one of the biggest threats to the river because of the pollutants it carries and the erosion and subsequent sedimentation it causes due to the massive variations in flow.



The Ford Rouge Plant at the mouth of the Rouge River where it empties into the Detroit River Photo: Rouge River National Wet Weather Demonstration Project

The health of the Rouge River varies greatly amongst its four branches and many tributaries. Industrial pollution is concentrated in the main stem of the river while development poses the biggest threat to the rest of the watershed. The heavily industrialized stem of the river that flows through the Ford Motor Company complex contains most of the river's industrial pollution and has the largest concentration of pollutants from upstream. The healthiest portion of the river is the Johnson Creek, a spring-fed tributary of the middle branch, cold and clean enough to support brown trout, now threatened by development and the subsequent warming, erosion, sedimentation, and eutrophication of the creek. The many lakes in the northern headwaters region are fairly clean but beginning to show the same signs of eutrophication and sedimentation that have plagued impoundments further downstream. Zebra mussels have entered the lakes and the Johnson Creek and will soon be widespread throughout the watershed.

What Has Been Accomplished



A streambank stabilization project Photo courtesy of Sally Petrella, [Friends of the Rouge](#).

The Rouge Project began in 1992 with a focus on creating ten new underground combined sewer overflow basins. Nine of those basins are currently complete. The historically contaminated Newburgh Lake has been dredged of its toxic sediments and re-opened. Local government agencies, community leaders and environmental organizations are working to implement additional projects that will improve water quality.

Additionally, a massive public education effort is being undertaken to limit nonpoint sources of pollution such as lawn fertilizer, pet waste, and other toxins that reach the river through storm drains.

Improving the health of the most polluted section of the river is the goal of the Gateway Project, a partnership of 12 agencies. The partnership seeks to create an eight-mile greenway to create a buffer between the river and non-permeable surfaces that are a source of polluted runoff. A master plan was developed that established guidelines for the restoration of wetlands, riparian shoreline, and fish and wildlife, and identified more than 50 proposed projects.



Rouge Rescue volunteer moving wood out of the river to open up the flow
Photo courtesy of Mike Darga

The first project, an environmental interpretive center has been completed. Ford Motor Company has begun work on a new plant that includes ecological measures such as a green roof and retention and reuse of all storm water on the property. The restoration of an historic oxbow that includes wildlife habitat improvements in the river is partially completed. Several businesses locating on the river were convinced to reorient their buildings to face the river rather than utilizing that area for the back of the building and the parking lot. Future projects include a trail system and a study to remove part of the concrete channel installed by the U.S. Army Corps of Engineers and replace it with a buffer zone of native plants and a walkway.

Friends of the Rouge works on restoration and stewardship of the river through public education and hands-on restoration and monitoring activities. Every year they send thousands of volunteers out to sites on the river to remove debris and restore the riparian corridor for Rouge Rescue. Students and adults are involved in monitoring the river for chemical and biological pollutants and indicator species. Workshops are held to teach residents practices they can use at home to improve the health of the river. Friends of the Rouge also works with other agencies to implement streambank stabilization projects on public and private property that utilize natural materials.

The Johnson Creek Protection Group is working to improve and maintain the health of the watershed's cleanest and most threatened creek. The group utilizes the media, public meetings and volunteer events to raise awareness of the creek and works closely with developers to assure the creek is protected.

Benefits to the River and Community

Research has shown an increase in oxygen levels in the river, as well as a decline in bacteria levels. Thousands of students and hundreds of adults have become more aware of the river and its issues through monitoring programs. Streambank stabilization projects using natural materials have been implemented in more than 4 public parks and

on 2 private properties. Twenty-two sites have been cleaned up in 2002 alone for Rouge Rescue. The seven subwatersheds of the Rouge worked together to write watershed management plans in 2001 to establish goals for protection and restoration of the river. Forty-three communities have completed their Storm Water Pollution Prevention Initiative Plan that details how they will manage their storm water over the next 3 years. The recent oil spill into the mouth of the Rouge River has galvanized public outrage over illegal dumping into the river and resulted in the introduction of a bill to double fines for illegal dumpers.

For More Information

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- Stormwater – Alternative Management/Treatment
- Reduced Hardscapes
- Recreation
- Public Art
- Cultural Interpretation
- Nature/River Education

References

Friends of the Rouge River --website www.therouge.org
The Rouge River Project – website <http://www.wcdoe.org/rougeriver>