

Section 2

Background

In 1985, the state of Michigan adopted the *Rouge River Basin Strategy* in response to public concerns. A key element in this strategy was the development of a plan to cleanup the river - a *Rouge River Remedial Action Plan* (Rouge RAP). The original Rouge RAP was completed in 1989 consistent with the commitments made by the states, provinces, and two federal governments as part of a *Great Lakes Water Quality Agreement*. This international agreement signed by the United States and Canada identified 42 pollution “hot spots” or Areas of Concern (AOCs) in the Great Lakes basin that needed attention. The Rouge River was one of the AOCs listed.

2.1 Rouge River Remedial Action Plan (Rouge RAP)

The original Rouge RAP, a nine-volume document, defined an ambitious 20-year program of actions needed to protect the public health and to make substantial progress to restore the impaired uses of the river. It focused on controlling the most easily regulated sources of pollution to the river, namely large industrial and municipal wastewater treatment plant discharges. At the time, the full cost of cleanup was estimated as \$900 million dollars. Subsequent updates of the original RAP indicate that the full cost to restore the river is much higher.

In 1993, the state reformed the committee originally established to prepare the Rouge RAP and expanded its membership to include a broad range of citizen, government, and business stakeholders. The new organization is called the Rouge RAP Advisory Council (RRAC). In 1994 under the guidance of the RRAC, a revised *1994 Rouge River Remedial Action Plan* was published. This 136 page report outlined the considerable progress that had been made in addressing major pollution sources in the river and outlined the additional steps that would be needed to restore uses that the updated report still indicated were impaired. The 1994 report documented the contributions of the Rouge River National Wet Weather Demonstration Project (Rouge Project) in accomplishing many of the objectives outlined in the original 1989 Rouge RAP.

2.2 Rouge Project

In 1992 Wayne County was awarded the first of several United States Environmental Protection Agency (U.S.EPA) grants to support the Rouge Project. The mission of the Rouge Project is to demonstrate effective solutions to water quality problems facing urbanized watersheds that can provide guidance to municipalities across the nation that face similar problems. The Rouge Project is guided in its efforts by the Rouge Project Steering Committee with representatives from cities, townships, and counties within the watershed; the Michigan Department of Environmental Quality (MDEQ); the U.S. EPA; citizens groups such as the RRAC and Friends of the Rouge; and private businesses.

In addition to providing several hundred millions of dollars in matching grants to communities to help construct separated sewers and retention basins to address

combined sewer overflows (CSOs), the Rouge Project has funded government and non-profit organizations' pilot projects that demonstrate how other sources of pollution can be controlled. Another undertaking of the Rouge Project is extensive monitoring of the water quality and related aquatic habitat of the river to measure progress and pinpoint areas that need further attention.

Within the first few years of monitoring, the Rouge Project documented problems in the river upstream of the CSOs. It became clear as the water quality monitoring results accumulated throughout the watershed that without a comprehensive, watershed approach the full control of CSOs and industrial discharges would not be sufficient to restore the impaired uses identified in the RAP. The testing results have shown that a more comprehensive watershed wide approach addressing contaminated storm water discharges, failing septic systems, excessive run-off from developed areas, bank erosion, construction activities, and a number of other sources would be needed.

2.3 Federal Court

Since the 1970s, the United States District Court for the Eastern District of Michigan has been involved in overseeing compliance with the federal Clean Water Act by the city of Detroit and the suburban customers of its Detroit Water and Sewerage Department. The federal court initially became involved through enforcement actions brought by the state and federal regulatory agencies concerning the operation of the Detroit wastewater treatment facility. In the early 1990s, the court facilitated a resolution to the state ordered correction of CSOs that resulted in a phased approach in which the responsible local agencies would be allowed to demonstrate cost effective alternatives to capture and treat those CSO discharges.

With early reports from the Rouge Project that the control of CSOs alone would not address all the pollution problems in the river, the federal court urged the 48 local public agencies within the Rouge River watershed to adopt a more comprehensive approach. In response to the court's concerns, a group of local agencies working within the Rouge Project proposed a watershed approach to the court that involved development of a new regulatory framework for the management of storm water and certain other pollution sources. The federal court encouraged the communities to pursue this approach, which was later embraced by the MDEQ when the MDEQ adopted the watershed-based voluntary general storm water permit in 1997. The U.S. EPA subsequently endorsed the state's general storm water permit, indicating that the permit would address at least the initial requirements under the federal Phase II Storm Water regulations.

2.4 Voluntary General Storm Water Permit

The MDEQ adopted an innovative approach to the regulation of storm water discharges from publicly controlled separate storm water conveyances that was modeled after an approach recommended by public agencies within the Rouge River

watershed. This unique regulatory approach requires the formation of subwatershed areas where communities and other public agencies responsible for storm water, work cooperatively to develop and implement plans to address sources of pollution.

The Middle 3 subwatershed is one of seven subwatersheds that encompass the entire Rouge River watershed. Communities and other public agencies with responsibility for storm water facilities can apply for a Certificate of Coverage (COC) under the general storm water permit and form subwatershed advisory groups based upon the hydrologic boundaries of the seven subwatersheds. Forty-four communities and agencies within the Rouge River watershed have applied for and obtained a COC for storm water discharges under the new general permit.

To receive the COC, each public agency must submit a plan that provides for public education on pollution prevention, and identifies the steps that will be taken to find and eliminate illicit discharges entering the storm water system. In addition, the public agencies that obtain coverage must agree to participate in the development of a subwatershed management plan.

To maintain coverage under the general storm water permit, after the subwatershed management plan is adopted, a public agency must submit a pollution prevention initiative that commits to specific actions it intends to undertake consistent with the cooperatively developed subwatershed management plan. While currently voluntary for most public agencies, new federal storm water regulations will require all communities within the Rouge River watershed to obtain a permit to discharge storm water within three years. The U.S. EPA has indicated that the Michigan watershed-based general permit will meet the new federal requirements.

A key element in this voluntary storm water permit is the requirement that the public agencies encourage the general public and other stakeholders to participate in the development of the subwatershed management plans. Review and discussion of the Middle 3 Subwatershed Management Plan in each community is one step that the Middle 3 Subwatershed Advisory Group is taking to involve the public and to encourage their participation. The *Rouge Report Card* prepared by the RRAC with assistance from the Rouge Project is another public information document intended to encourage public participation in the restoration of the Rouge River.

2.5 Rouge River Report Card

The *Rouge River Report Card* (Report Card) is a tool to evaluate both the condition of the river as well as the success of efforts to protect and restore it. One of the main goals of the Report Card is to stimulate thinking and encourage stakeholder participation in the Remedial Action Plan (RAP) update and revision process. The Report Card is also a tool that local communities and other public agencies can use as a guide when developing their subwatershed management plans. The recommendations in the Report Card have been considered in the goals and objectives contained in this plan.

The Report Card provides an overview of the entire Rouge River watershed and helps put into perspective the problems, alternative solutions and successes that will be identified in each subwatershed. The Report Card also describes 18 indicators that measure the health and condition of the watershed by telling; *Where We Were, Where We Are, Where We Want to Be*, as well as recommendations on *How to Get There*.