

# **PUBLIC INVOLVEMENT PROGRAMS THAT SUPPORT WATER QUALITY MANAGEMENT**

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The Rouge River, a tributary to the Detroit River, in southeast Michigan, has been documented as a significant source of pollution to the Great Lakes System. The Rouge River Watershed spans approximately 438 square miles in 48 communities, three counties and is home to over 1.5 million residents. The eastern portion of the watershed consists of much of the older, industrial areas of Detroit and Dearborn. The western and northern portions consist of newer suburban communities and areas under heavy development pressure.

This paper discusses the programs used by the Public Involvement team of Wayne County's Rouge River National Wet Weather Demonstration Project (Rouge Project) to first increase watershed awareness in Rouge River Watershed residents and business owners; educate them about pollution sources to the Rouge River and involve them in restoration of the Rouge River by showing them that small changes in their daily activities can help improve water quality and restore the river.

The Rouge Friendly Neighborhood Program was piloted over a two-year period in watershed neighborhoods in three distinctly different areas of the watershed. All neighborhoods were surveyed to determine level of knowledge existing about water quality issues, lawn care maintenance and pollution prevention practices. The results were used to fashion a neighborhood program for each area. All three neighborhoods received Rouge Friendly brochures, newsletter articles and other materials.

The Rouge Friendly Business Program, a companion program to the neighborhood effort, sought to educate small-to-mid-sized businesses that they can positively impact the Rouge River by making small changes to daily business practices. Since auto-related businesses are very common in the Rouge River Watershed, an automotive services roundtable was convened. The partners included representatives of automotive service associations, the local chamber of commerce and businessmen who met for a year to review draft materials, make suggestions about the program's promotion and help mold the program before it was implemented. Once implemented, the industry representatives promoted the program in their publications and recruited businesses to participate in the program.

This paper will describe both pollution prevention programs and then discuss how the Brightmoor neighborhood in the Rouge River Watershed was impacted by the Rouge Friendly Neighborhood and the Rouge Friendly Business Programs.

### **The Rouge Friendly Neighborhood Program**

The Rouge Friendly Neighborhood Program was designed to be carried out by responsible neighborhood organizations. Potential requirements were:

1. The group participating in the program must have a defined area or neighborhood.
2. The group would participate in the Friends of the Rouge (FOTR) RiverWatch Program. The river system need not pass directly through the neighborhood for participation. A segment could be identified for the group by FOTR.
3. The group would also participate in the FOTR Storm Drain Stenciling Program. The stenciling of storm drains should include, but is not limited to, all the storm drains within their designated neighborhood area.
4. The group should actively participate and/or encourage proper household hazardous waste management. This could occur through the following methods:
  - Reduced purchasing of hazardous house chemicals;
  - Proper use of household hazardous chemicals;
  - Proper disposal of hazardous household chemicals, and,
  - Use of less toxic alternatives to household hazardous chemicals
  - The group can accomplish this requirement by distributing information concerning proper household hazardous waste management to their designated neighborhood.
5. The group would facilitate in the education of residents regarding non-point source pollution. Information would be provided by the Rouge Project Team for distribution to the designated neighborhoods.
6. Submittal of semi-annual reports discussing the activities that have been taking place could be a requirement to maintain Rouge Friendly Neighborhood status.

Three neighborhoods representing different demographics and development history in the watershed were chosen as pilots for the Rouge Friendly Neighborhood Program. They were the Brightmoor area of Detroit, an older, developed area of the watershed along the Main Branch of the Rouge River; Golfview Manor subdivision in Dearborn Heights, a newer subdivision along the Middle Branch of the Rouge River and West Bloomfield Place subdivision in West Bloomfield Township, a developing area along the Upper Branch of the Rouge River.

These three pilots represented communities with diverse demographics and Rouge River concerns. The Brightmoor neighborhood was a deteriorating area with strong community activism regarding neighborhood problems and concerns. The neighborhood also showed strong stewardship for the Rouge River, which served as a western boundary to the neighborhood and flowed through a nearby park. Golfview Manor in Dearborn Heights was a more upscale, manicured neighborhood that was also very active through its subdivision association, but didn't have a real connection to the River. West Bloomfield Place in West Bloomfield Township was an upper income, less urban area bounded by a wetland.

Meetings were held with a core group of representatives from each neighborhood to discuss what the program was; what the expected outcomes were, and to garner support from the neighborhoods' leadership.

The residents of all three pilot areas were sent surveys, distributed by mail or door-to-door to gauge their knowledge of Rouge River water quality; storm water issues and household hazardous waste disposal. In addition, respondents were asked for demographic information. The survey information was used to determine what the Rouge Friendly Neighborhood Program should focus on in each particular neighborhood.

Educational materials that had been developed about storm water pollution, household hazardous waste and its disposal and watershed awareness were reviewed by each group. Each core group helped develop the particular program that would be implemented in their neighborhood, because Rouge Project staff knew that no program would be a success without the core groups' support and endorsement. These core group members were relied on to explain the program at neighborhood meetings.

### **The Rouge Friendly Business Program**

The Rouge Friendly Business Program was developed as a partnership between Wayne County, local government and the business community to restore and protect the Rouge River. To accomplish this goal, information and assistance is provided to small business owners to teach them how they can positively affect the water quality of the Rouge River by changing some of their everyday practices. The education process is not about major contaminants, but those little things that slip the mind, such as keeping the dumpster lid closed and storing materials under cover. These simple actions can affect water quality because they stop pollutants from entering the storm system. As an incentive to participate, Wayne County embraced the concept that businesses in the watershed that demonstrate stewardship and a strong environmental ethic should be recognized by the community at large for their voluntary participation. As such these businesses should enjoy greater name recognition through the efforts of the local and regional media as well as specific program materials such as decals and magnets that identify the business as Rouge Friendly.

The Rouge River Watershed has approximately 42,000 businesses in its 48 communities and three counties. To design program materials that would have the highest impact, three criteria were developed to target business types. They are:

- The business has a high incidence of illicit connections to storm drains;
- The business conducts a significant number of pollutant generating activities outdoors, and,
- The business is found in large numbers in the watershed.

Using this criteria, six types of businesses were selected and specific activities identified. They are:

- Vehicle Service Industry
- Food producers, grocers and eating establishments
- Metal Machining
- Earth Disturbing Construction
- Remodeling and Repair Contractors
- General Business

Pollution control criteria were established for each activity. These criteria were used to create a self-assessment form to be used by a business owner to evaluate how “Rouge Friendly” their businesses are. Best Management Practices (BMPs) were written that correspond to each activity and this information was put into a booklet along with a self-assessment form for distribution.

Representatives of various trade organizations were invited to participate in a Vehicle Service Industry Roundtable. The roundtable was asked to review and comment on the educational materials, the self-assessment form, the BMPs and the best way to conduct program outreach. Rouge Project staff sought to engage businesses in an ongoing dialogue to determine what approach would work best with a secondary goal of how to get businesses to participate. Feedback from this group resulted in a name change from the “Clean Business Program” to the “Rouge Friendly Business Program.” This was not a quick process as it took approximately six months of meetings to: 1) form a Vehicle Service Industry roundtable, 2) explain the purpose of the Rouge Friendly Business Program, and, 3) refine the program and products. The Rouge Friendly Business Program elements were finalized as follows:

- Self-assessment form and action plan
- Best Management Practices
- Site Visits by technical staff
- Recognition materials for participating businesses (stickers and magnets)
- Business pledge and newspaper recognition

After these materials were finalized, Wayne County and Rouge Project staff promoted the Rouge Friendly Business on a pilot basis and recruited businesses through the following mechanisms:

- Business Roundtable contacts
- Letter and telephone contacts
- Door-to-door contact with businesses
- Contact through homeowner/neighborhood associations
- Integration of Business and Residential Programs

By the end of the pilot period, the Wayne County Department of Environment had recognized 20 businesses as Rouge Friendly.

### **The Brightmoor Community Pilot**

The Brightmoor area of Detroit was developed in the 1920s as a neighborhood for working-class families. Most houses are frame, with the newer areas of the neighborhood (1940s and 1950s) of brick construction. Over the past 15 years, the Brightmoor area has deteriorated. Its once vibrant business strip is dotted with boarded, vacant buildings, graffiti, trash and debris. Whole blocks of residential land are vacant and overgrown and illegal dumping is abundant. Environmental abuses ranged from a myriad of abandoned vehicles, to illegal car repair businesses on residential streets. The Rouge Friendly Neighborhood Survey (Attachment A) taken in Brightmoor in 1996 showed that the top two environmental concerns in the area were illegal dumping and abandoned housing.

Despite these challenges, the Brightmoor neighborhood had two characteristics that made it a viable pilot for the Rouge-Friendly programs. One, Eliza Howell Park, located on its western edge, was traversed by two branches of the Rouge River. Second, Brightmoor had a wealth of grassroots organizations who were working to make the neighborhood better and were responsible annually for removing log jams and other debris from the Rouge River in Eliza Howell Park during Rouge Rescue, which was sponsored by FOTR, a grassroots organization serving the whole watershed.

Initial contact was made with the Brightmoor Concerned Citizens and other neighborhood representatives in January, 1996. The group agreed that they would like to participate as a Rouge Friendly Neighborhood pilot. A month later, the same group met again with Rouge Project staff. This time, city parks staff were present. They were told about the possibility of grant funding for storm water projects by the Rouge Project. The group brainstormed the kinds of things they would like to see happen at the park, which had suffered from spotty maintenance. They agreed they would like to see wildflowers and prairie grass planted; nature trails restored and a community garden created. The parks

department later applied for and was granted a \$180,000 grant to plant wildflowers, prairie grasses and install nature trails in the lower end of the park, near the Rouge River.

The next step in the program was to survey residents about their knowledge of pollution entering the river and household hazardous waste disposal; their neighborhood environmental concerns, and demographic information. The survey was created with input by the core neighborhood group. The major data extracted from the survey were:

- Seventy-eight percent thought the Rouge River was polluted or very polluted, and 20 percent thought the river was getting worse.
- Thirty-eight percent incorrectly answered or didn't know that the storm drains lead directly to the Rouge River. However, 56 percent understood that sanitary sewers go to the wastewater treatment plant.
- Eighteen percent correctly answered that industry pollutes the Rouge River the least. Sixty-six percent thought storm water pollutes the least.
- Eighty-seven percent maintained their own lawn. There was an even distribution among those who never fertilize their lawns and those that fertilize 1-2 times per year.
- Seventy-five percent didn't change their own motor oil.
- Eighty percent took their car to a car wash instead of washing it themselves.
- Ninety-two percent claimed they knew what household hazardous waste is, and 73 percent correctly identified motor oil as a household hazardous waste. However, 54 percent didn't properly dispose of their wastes.
- Eighty-three percent were committed/ very committed to make small changes to prevent pollution.

Following are issues in order of importance to the neighborhood:

1. Abandoned buildings
2. Illegal dumping
3. Household hazardous material disposal
4. Frequency of street sweeping and storm drain cleaning

5. Recycling
6. Do-it-yourself car repair/illegal car lots on residential streets
7. Overuse of garden/lawn pesticides
8. Overuse of fertilizer
9. Composting

Wayne County Rouge Project staff, FOTR and Brightmoor Concerned Citizens leadership made a presentation, including survey results, to the general membership in May, 1996. The general membership was enthusiastic about the program. The annual Rouge Rescue held in Eliza Howell Park on June 1, 1996 was expanded to include other activities such as storm drain stenciling, a tour of a newly constructed combined sewer overflow basin, and children's games.

Subsequent meetings with the Brightmoor group were used to brainstorm what the specific program elements should be and what outcomes were expected. The following elements were supported by the core group:

- Urban gardens on vacant lots;
- Composting education;
- Attempting to get rid of the massive log jam at the confluence of the Upper and Main Rouge River in Eliza Howell Park;
- A tour of the area for the Detroit environmental court judge;
- Lawn signs that read "I support the Rouge Friendly Neighborhood Program;"
- Early recognition of well-maintained lawns and gardens/Brightmoor resident of the month;
- A Brightmoor Rouge Friendly Business Program;
- A renters' workshop to educate tenants about their rights and responsibilities and the responsibilities of landlords, and,
- Educational materials in the various neighborhood newsletters.

All of the activities were implemented except the lawn signs; the recognition of well-maintained gardens, and the renters' workshop. By the fall of 1996, the focus had shifted to conducting a monthly combined

resident/business owners meeting to include businesses, which were primarily vehicle service oriented, into the Rouge-Friendly initiative.

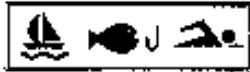
## Results and Outcomes

**Rouge Friendly Neighborhood Program:** Because of the enthusiasm and commitment of Brightmoor residents and business owners, many activities were conducted. They were:

- Thousands of educational brochures and children's materials were distributed in community centers, businesses, schools and newsletters;
- A local business owner successfully sued a public utility that was pumping hundreds of gallons of polluted storm water into the Rouge River;
- The local community organization not only enthusiastically participated in the annual Rouge Rescue event, but conducted another such event on its own in the fall.
- Through a partnership with the city parks department, the Greening of Detroit and the Brightmoor Concerned Citizens, 100 trees were planted in Eliza Howell park by 200 local elementary school students.
- City officials agreed to conduct an environmental ticket blitz in the neighborhood, which resulted in the following tickets being written: 179 parking tickets; 71 abandoned cars tagged for removal; eight stolen cars being towed; 15 public works tickets for bulk garbage being put at the curb too early; two environmental protection tickets and 47 tickets for inoperable vehicles.
- A monthly meeting focused on environmental issues that included neighborhood residents, business owners, non-profit organizations, city officials, including police commanders, and county officials.

**Rouge Friendly Business Program:** While many outstanding initiatives were accomplished by meeting with the Brightmoor stakeholders monthly, only one Brightmoor business was recognized as Rouge Friendly after ten months of monthly meetings. The meetings were well-attended and business owners felt comfortable discussing their environmental concerns. In June of 1997, the approach to recruit Brightmoor businesses as Rouge Friendly was changed. A community leader was paired with a technical staff member and they proceeded to visit neighborhood businesses. They visited 14 neighborhood businesses several times over a two month period. Information about the program was left with the business owner, as well as an offer from the technical staff member to help the business owner with the self-assessment form. Through this effort Wayne County recognized six Brightmoor businesses as Rouge-Friendly. This was a successful (43 percent participation), but labor intensive method of recruiting businesses. More recently, Wayne County has renamed the business program the "River Friendly Partners Program," and has refined the ways businesses are recruited.





## Are you willing to **prevent pollution** in your **neighborhood**?

Start **today** by filling out this questionnaire.

We are working with the **Rouge River National Wet Weather Demonstration Project** to make our subdivision a more attractive place to live. We have been chosen as one of three pilot neighborhoods in the Rouge River Watersheds to participate in a pollution prevention program that may be used as a model for other urban watersheds across the country. In order to design a program that best fits our needs, we need you to answer a few questions. The following survey is voluntary and confidential. Use the enclosed pre-stamped envelope to return the questionnaire by **April 22, 1996**.

- |   | <i>Very polluted</i>   | <i>Somewhat polluted</i>  | <i>Not polluted</i>  |
|---|--|---|----------------------|
| 1. Do you think the Rouge River is polluted?  | 5  | 4   | 3 2 1                |
|   | <i>Getting cleaner</i>   | <i>Staying the same</i>   | <i>Getting worse</i> |
| 2. Do you think the Rouge River is getting cleaner, staying the same, or getting worse? | 5  | 4   | 3 2 1                |
| 3. Where does water go when it enters an outside storm drain in your neighborhood?      | <input type="checkbox"/> To a storage tank under the ground<br><input type="checkbox"/> To the Rouge River<br><input type="checkbox"/> To the waste water treatment plant<br><input type="checkbox"/> Don't know   |   |                      |
| 4. Where does water go when it is flushed down the toilet or sink?                      | <input type="checkbox"/> To a storage tank under the ground<br><input type="checkbox"/> To the Rouge River<br><input type="checkbox"/> To the waste water treatment plant<br><input type="checkbox"/> Don't know   |   |                      |
| 5. What pollutes the Rouge River the LEAST?   | <input type="checkbox"/> Combined sewer overflows<br><i>(a mixture of sewage and stormwater that flows into the river when it rains.)</i><br><input type="checkbox"/> Stormwater <i>(water that runs off the ground and enters the river)</i><br><input type="checkbox"/> Industry |   |                      |
| 6. How do you maintain your lawn?   | <input type="checkbox"/> Paid professional company<br><input type="checkbox"/> Paid neighbor<br><input type="checkbox"/> Someone in the household maintains it   |   |                      |
| 7. How often is your lawn fertilized?   | <input type="checkbox"/> 1 to 2 times per year<br><input type="checkbox"/> 3 to 4 times per year<br><input type="checkbox"/> More than 4 times per year<br><input type="checkbox"/> Never  |   |                      |
| 8. Where do you change the oil in your car?   | <input type="checkbox"/> Auto Repair Shop/Quick Oil Change<br><input type="checkbox"/> Yard <input type="checkbox"/> Street <input type="checkbox"/> Driveway  |   |                      |
| 9. Do you usually wash your car or take it to a car wash?                               | <input type="checkbox"/> Wash it myself<br><input type="checkbox"/> Car wash   |   |                      |
| 10. If you change your oil at home, how do you dispose of it?                           | <input type="checkbox"/> In the garbage<br><input type="checkbox"/> In the sewer<br><input type="checkbox"/> Don't know  | <input type="checkbox"/> On the ground<br><input type="checkbox"/> Take to facility that accepts used oil |                      |
| 11. Do you know what household hazardous materials are?                                 | <input type="checkbox"/> Yes<br><input type="checkbox"/> No  |   |                      |
| 12. Which of the following is a household hazardous material?                           | <input type="checkbox"/> Baking soda<br><input type="checkbox"/> Motor Oil   | <input type="checkbox"/> Lemon oil<br><input type="checkbox"/> Vinegar                                    |                      |

