10 Actions that will Address the Environmental Problems in the Detroit River Area of Concern



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1. Protect Aquatic Habitat in the Lower Detroit River

Action: Protect Existing, High Quality Habitat in the Lower End of the Detroit River through Land Acquisitions and Conservation Measures.

Rationale: The Detroit River has lost over 90% of the coastal habitat, primarily due to industrial and urban impacts. The lower section of the Detroit River, which includes Grassy Island, Grosse Ile, Calf Island, Celeron Island, Round Island, Gibraltar Bay, Sugar Island and Stoney Island contains the last remaining, high quality coastal and aquatic habitat on the U.S. side of the Detroit River Area of Concern. This area, also known as the Detroit River crescent, serves as a significant spawning area for a variety of sport fish as well as a feeding and staging area for waterfowl and migrating birds. Currently, the Grosse Ile Nature and Land Conservancy is spearheading concerted efforts to acquire the privately owned islands for conservation and protection by establishing conservation easements, purchasing privately owned areas, and through the nomination for acquisition through the Michigan Natural Resources Trust Fund.

2. Create a Public Access Greenway to the Detroit River in Southwest Detroit and Southwest Windsor

Action: Form Partnerships and Pool Resources to Create a Greenway for Public Access on the Detroit River From Chene Park to Zug Island and Sandwich west.

Rationale: There is very limited public access to the Detroit River in both southwest Detroit and southwest Windsor. Efforts to create a linked Greenway along the U.S, side of the Detroit River has begun through partnerships created under the Detroit Greenways Initiative. A binational effort to further accelerate the Detroit River Greenways Initiative will increase the efforts already begun to provide public access to the river and help build support for future remedial actions. Further, a binational greenways initiative will provide the needed support to form more partnerships to accelerate these efforts and establish measurable benchmarks for a connected greenway on the Detroit River. Two specific examples for increasing public access are: (1) create a continuous greenway from Chene Park to Zug Island; and, (2) create a continuous greenway from Sandwich Mill Street Park to Black Oak Heritage Park. Further, all greenways should address habitat enhancement along the Detroit River.

3. Stop Raw Sewage Discharges to Fox Creek

ACTION: Accelerate elimination of raw sewage discharges via CSOs from Grosse Pointe Park to Fox Creek.

RATIONALE: Raw sewage from Grosse Pointe Park enters Fox Creek in Detroit on an intermittent basis. These raw sewage discharges create violations of water quality standards for body contact recreation and aesthetic and odor problems. In addition, these raw sewage discharges are an example of environmental racism where affluent white suburbs dump their raw sewage into underprivileged African-American neighborhoods.

4. Discontinue Incineration of Sewage Sludge

ACTION: Halt the practice of incineration of sewage sludge in the Area of Concern.

RATIONALE: Incineration of sewage sludge has no beneficial effect on persistent toxic substances such as PCBs and mercury. Settling of particles that are contaminated with these chemicals is enhanced by optimal design and management of the treatment facility. However, the presence of these and other toxic contaminants does not allow utilization of the collected sludge as fertilizer which is a disposal method that many communities take advantage of. The method opted for by the two largest sewage treatment plants in the Area of Concern (Detroit and Wyandotte) is incineration. The collected sludge is burned to form ash and flue gas; the latter contains most of the PCB and mercury which in turn falls out on the watershed and thus is dispersed throughout the Area of Concern. Management of toxic substances in the influent to these facilities is the only way to interrupt this cycle and permit alternative methods of sewage sludge disposal to be viable.

5. Responsibly Dispose of Contaminated Sediments

ACTION: Remove and responsibly dispose of contaminated sediments from Monguagon Creek

RATIONALE: Monguagon Creek has been the conduit for wastewater discharged ELF-Atochem (and its predecessor Pennwalt) to the Trenton Channel of the Detroit River for almost 40 years. Sediment in the creek has accumulated oil, metals and organic contaminants that are acutely toxic to aquatic life and humans. ELF-Atochem has agreed to remove this sediment from the creek bed, but plans are to dispose of them in a sanitary landfill (TYPE II Municipal Landfill). This type of landfill is not designed to contain this extremely hazardous material and will eventually release the pollutants to the groundwater via leachate and therefore back to the watershed. Responsible disposal of these sediments would be destruction of the organic material and permanent confinement of residue in a TSCA approved landfill.

6. Remediate Known Brownfield Sites

ACTION: Accelerate remediation of brownfield sites like Carter Industrial Site, Revere Copper and Brass, and Uniroyal.

RATIONALE: Many "brownfield sites" exist in the Detroit area where soil and sediment contamination create environmental and human health concerns, and block economic redevelopment. For example, the Carter Industrial Site is a well known, long-standing source of PCB contamination. PCB levels in soils are as high as 127,000 mg/kg. PCB levels in sewer sediments are as high as 4,900 mg/kg. PCB levels in nearby Detroit River sediments are as high as 40 mg/kg. Site remediation should be accelerated, including the secondary contamination in sewer sediments and Detroit River sediments.

7. Remediate Grassy Island as a Combined Disposal Facility

ACTION: Accelerate remediation of Grassy Island on the Wyandotte National Wildlife Refuge through a partnership with the U.S. Department of Interior.

RATIONALE: In the 1960s and 1970s, the U.S. Army Corps of Engineers constructed dikes composed of sand and clay around the original island, creating the first confined disposal facility (CDF) in the Great Lakes. Sediments on Grassy Island are known to contain PCBs, PAHs, mercury, and other heavy metals. The U.S. Department of Interior and the U.S. Army Corps of Engineers should establish a partnership with local universities and citizen groups to design the restoration project, evaluate remedial options, select preferred technologies, and monitor effectiveness. This project should be elevated in priority in order to guide future projects in the Detroit River ecosystem.

8. Reduce Well Known Sources of Hazardous Air Pollutants

ACTION: Actively work to reduce levels of Mercury, Dioxin, PCBs, VOCs and Particulate Matter (PM 10) and (PM 2.5) that are being emitted from known sources and negatively affect air quality in Detroit and Windsor.

RATIONALE: Air quality in the Detroit River AOC has been identified as among the worst in the Great Lakes Region, with levels of ozone, mercury, particulate matter, dioxin and PCBs that are directly responsible for many adverse health effects in children and older populations. Many of the sources are well known, and include the Detroit Wastewater Treatment Plant sludge incinerator, the Detroit Municipal Solid Waste Incinerator and the local steel manufacturing plants, National Steel and McClouth Steel. Efforts to reduce the emissions of these chemicals have not been successful and continue to affect both air and water quality in the Detroit River AOC. Serious efforts to address these transboundary emissions, including a plan to reduce them should be developed by 1999, with adequate air monitoring devices placed in strategic locations to track the progress made.

9. Require Secondary Treatment for West Windsor Treatment Plant

ACTION: Accelerate the plan to provide secondary sewage treatment at the West Windsor Sewage Treatment Plant, which now only is a primary treatment facility.

RATIONALE: The West Windsor Plant is the largest primary sewage treatment facility on the Canadian side of the Great Lakes. As a result of the inadequate treatment of sewage at this facility, discharges of nitrogen to the Detroit River exceed the current Ontario Water Quality Objectives. Plans to move from a primary treatment facility to a secondary treatment facility have been on the books for years. The Province should provide the necessary resources to accelerate this plan to achieve secondary treatment by 1999.

10. Protect and Preserve Peche Island

ACTION: Pool resources and develop an overall plan to ensure that Peche Island remains in public hands.

RATIONALE: Too many islands in the Detroit River (Bob-Lo, Fighting Island, Stoney Island) are privately owned, making it difficult to ensure the natural habitat these islands provide are not lost or significantly reduced due to residential or commercial development. Further, the ability to adequately monitor these natural areas for habitat loss and efforts to rehabilitate them are also extremely difficult. Both Ontario Ministry of Natural Resources and the City of Windsor Parks and Recreation Department have suggested a rehabilitation plan for Peche Island be developed and acted on within the context of the Detroit River remedial action plan. By identifying the various partners and strengthening their ability to acquire this island to keep it in public hands, this island can be protected and rehabilitated.