

# Chapter 1: Introduction



*U.S. Fish & Wildlife Service*

The Detroit River has long served the United States and Canada as a vital transportation corridor and center for industries that helped forge the economies of both nations. But the river and its ecosystem have paid a tremendous price for human progress. Indeed, in our mind and in reality, most of what was natural in and around the Detroit River is gone. Yet special places exist alongside the concrete, steel, and groomed gardens of this vast metropolitan area; the beginnings of North America's first International Wildlife Refuge. A place where wildlife can come first.

What could be the future of this fledgling refuge in the midst of millions of people? We try to answer that question in this Comprehensive Conservation Plan. We will describe the creation of the Refuge, the historical and current conditions of the area, and a vision for its future.

A positive view for the future of the Detroit River and Lake Erie Western Basin reflects an abiding faith in nature. One possible view would have been to look at what has been lost, wring our hands, and give up. Another possible view is to recognize what is left and what can recover, value it, and work for its conservation. The multitude of partners that are making the Detroit River International Wildlife Refuge a reality have chosen the second view.

Our view is influenced by the recognition of wildlife's persistence. Despite almost complete conversion of the riverbank to concrete and steel, despite elimination of more than 95 percent of the coastal wetlands, despite decades of industrial pollution, the lower Detroit River remains a globally significant area for congregating waterfowl, especially diving ducks. Sport fishing, once in dire trouble, has become a foundation for a growing tourism economy.

We intend to help make the Detroit River ecosystem a safer place for fish, wildlife, and people. We intend to work with others on both sides of the border to conserve, re-establish and improve natural areas in the ecosystem. In this plan we describe our intended actions for the next 15 years.

## Refuge Location

The Detroit River International Wildlife Refuge is located along the Lower Detroit River and western shoreline of Lake Erie, in Wayne and Monroe Counties, Michigan (Figure 1). Established by Public Law 107-91 on December 21, 2001, the Detroit River International Wildlife Refuge is the first international refuge in North America. The authorized Refuge boundary includes islands, coastal wetlands, marshes, shoals and riverfront lands along 48 miles of the Lower Detroit River and Lake Erie in Michigan (Figure 2). Its location also makes it unique – the Detroit River International Wildlife Refuge is one of only a few refuges situated in a major metropolitan area.

The Refuge establishing act redesignated islands that were once part of Wyandotte National Wildlife Refuge (NWR) – Grassy Island, Mud Island and Mamajuda Island –

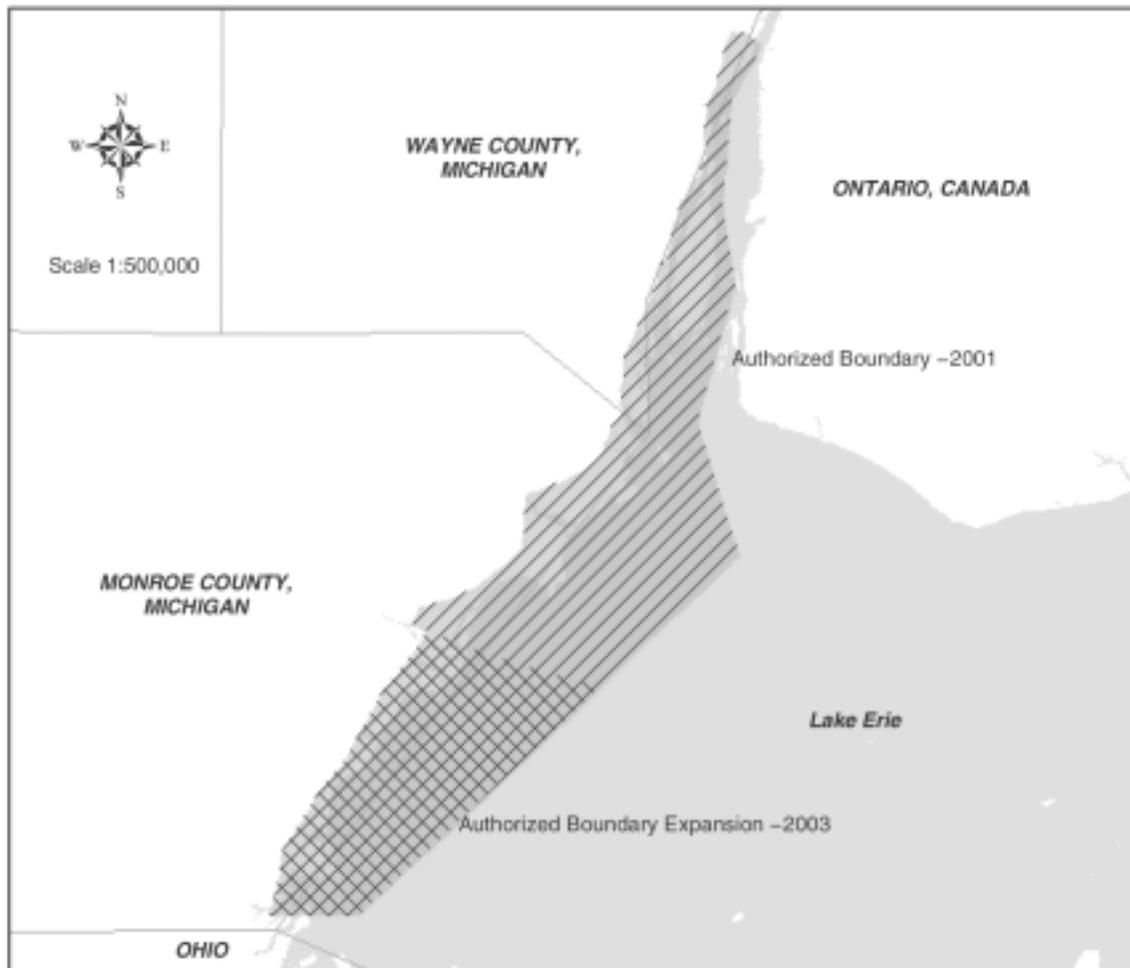
as part of the new international refuge. When created in 1961, the original Wyandotte NWR consisted of two islands, Grassy and Mamajuda, and the shallow water shoals around the islands. Since the early 1960s, Mamajuda Island has decreased in size and is exposed only during low water levels. Both islands are located on a bar that lies between the Trenton and Fighting Island ship channels in the central part of the Detroit River. This bar extends from the mouth of the Ecorse River to the head of Grosse Ile, a distance of approximately 3.5 miles. It ranges from one-quarter to one-half mile in width and at present it is covered with 3 to 8 feet of water. At the present time, only 72 acres of Grassy Island are exposed.

The 18.5-acre Mud Island and 71.5 acres of submerged aquatic shoals were added to the Refuge on June 14, 2001. On September 26, 2002, Calf Island, an 11-acre island in the Trenton Channel of the lower Detroit River, was donated for inclusion in the Refuge. The Nature Conservancy purchased the island from a private party while several organizations worked in partnership to secure reimbursement funds through a federal North American Wetlands Conservation Act grant. Partners that contributed in-kind matches for this grant included Ducks Unlimited, the Greater Detroit American Heritage River Initiative and Solutia, a chemical industry in Trenton, Michigan. A 152-acre Lake Erie coastal property was purchased from a private landowner on August 18, 2003. This acquisition, using funds from the Migratory Bird Conservation Fund, brings the entire Refuge to 544 acres in size.

**Figure 1: Location of Detroit River International Wildlife Refuge**



Figure 2: Detroit River International Wildlife Refuge Authorized Boundary



On September 25, 2003, the Service and Detroit Edison Company entered into a cooperative agreement for managing wildlife habitat on over 600 acres of the 1,200-plus acre nuclear facility in Frenchtown Township (Fermi 2). In addition, the U.S. Army Corps of Engineers (Corps) is proposing to transfer a 168-acre parcel of land adjacent to the Pointe Mouillee State Game Area and Estral Beach for inclusion in the Refuge. The Service has accepted a management permit for the site and will be working on the transfer process with the Corps over the next year or so.

## The U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service is the primary Federal agency responsible for conserving, protecting, and enhancing fish and wildlife and their habitats for the continuing benefit of the American people. Specific responsibilities include enforcing Federal wildlife laws, managing migratory bird populations, restoring nationally significant fisheries, administering the Endangered Species Act, and restoring wildlife habitat such as wetlands. The Service also manages the National Wildlife Refuge System.

**Figure 3: National Wildlife Refuges and Waterfowl Flyways**



### The National Wildlife Refuge System

Managing the National Wildlife Refuge System has evolved into a significant role for the Service. Founded in 1903 by President Theodore Roosevelt with the designation of Pelican Island as a refuge for Brown Pelicans, the National Wildlife Refuge System is the world's largest collection of lands specifically managed for fish and wildlife. The System is a network of more than 500 national wildlife refuges encompassing more than 93 million acres of public land and water. The majority of these lands – 82 percent – is in Alaska, with approximately 16 million acres spread across other states and several island territories. Refuges provide habitat for more than 5,000 species of birds, mammals, fish, and insects. Like Pelican Island, many early national wildlife refuges were created for herons, egrets and other water birds. Others were set aside for large mammals such as elk and bison. Most refuges, however, have been created to protect migratory waterfowl. This is a result of the United States' responsibilities under international treaties for migratory bird conservation as well as other legislation, such as the Migratory Bird Conservation Act of 1929. A map of the National Wildlife Refuge System shows refuges dotting the four major flyways that waterfowl follow from their northern nesting grounds to southern wintering areas (Figure 3).



National wildlife refuges also play a vital role in preserving endangered and threatened species. Among the refuges that are well known for providing habitat for endangered species are Aransas National Wildlife Refuge in Texas, the winter home of the Whooping Crane; the Florida Panther National Wildlife Refuge, which protects one of the nation's most endangered mammals; and the Hawaiian Islands National Wildlife Refuge, home of the Laysan Duck, Hawaiian monk seal, and many other unique species.

Refuges also provide unique opportunities for people. When it is compatible with wildlife and habitat needs, refuges can be used for wildlife-dependent activities such as hunting, fishing, wildlife observation, photography, environmental education and environmental interpretation. Many refuges have visitor centers, wildlife trails, automobile tours, and environmental education programs. Nationwide, more than 30 million people visited national wildlife refuges in 1997.

The National Wildlife Refuge System Improvement Act of 1997 established many mandates aimed at making the management of national wildlife refuges more cohesive. The preparation of comprehensive conservation plans is one of those mandates. The legislation requires the Secretary of the Interior to ensure that the mission of the National Wildlife Refuge System and purposes of the individual refuges are carried out. It also requires the Secretary to maintain the biological integrity, diversity, and environmental health of the Refuge System.

## Goals of the National Wildlife Refuge System

- # To fulfill our statutory duty to achieve refuge purpose(s) and further the System mission.
- # Conserve, restore where appropriate, and enhance all species of fish, wildlife, and plants that are endangered or threatened with becoming endangered.
- # Perpetuate migratory bird, interjurisdictional fish, and marine mammal populations.
- # Conserve a diversity of fish, wildlife, and plants.
- # Conserve and restore, where appropriate, representative ecosystems of the United States, including ecological processes characteristic of those ecosystems.
- # To foster understanding and instill appreciation of fish, wildlife, and plants, and their conservation, by providing the public with safe, high-quality, and compatible wildlife-dependent public use. Such use includes hunting, fishing, wildlife observation and photography, and environmental education and interpretation.

## Great Lakes Basin Ecosystem Team Objectives

The Great Lakes Basin Ecosystem Team is composed of 43 U. S. Fish and Wildlife Service field stations in the Great Lakes ecosystem that represent a range of Service programs including Fisheries, national wildlife refuges, and law enforcement. Through the Team and its partners in the ecosystem, the Service addresses landscape-scale resource objectives using an ecosystem approach. The Great Lakes Basin Ecosystem Team is focusing much of its efforts on the basin-wide issues of lake sturgeon restoration and island conservation. Specific objectives of the team in these two areas include the following:

- # Restoration of Lake Sturgeon: Restore the lake sturgeon throughout the Great Lakes through population assessment, assessment of the genetic make-up of various stocks, development and implementation of recovery plans, and development of fish passage technology. Identify, coordinate, and undertake activities with appropriate internal and external partners.
- # Conservation of Great Lakes Islands: Recognize the importance of islands to wildlife – particularly migratory birds, fish, and endangered species – and the need to complete an overall assessment of the islands for protection and restoration efforts.

## Refuge Purposes

The Detroit River International Wildlife Refuge was established by an Act of Congress, which became Public Law 107-91 on December 21, 2001. Section 4 of the Act states the following purposes for the new Detroit River International Wildlife Refuge:

- # To protect the remaining high-quality fish and wildlife habitats of the Detroit River before they are lost to further development and to restore and enhance degraded wildlife habitats associated with the Detroit River.
- # To assist in international efforts to conserve, enhance, and restore the native aquatic and terrestrial community characteristics of the Detroit River (including associated fish, wildlife, and plant species) both in the United States and Canada.
- # To facilitate partnerships among the United States Fish and Wildlife Service, Canadian national and provincial authorities, State and local governments, local communities in the United States and in Canada, conservation organizations, and other non-Federal entities to promote public awareness of the resources of the Detroit River.

Wyandotte National Wildlife Refuge was established by an Act of Congress known as Public Law 87-119, 75 Stat. 243, 87th Congress, H.R. 1182, dated August 3, 1961: ... “to be maintained as a refuge and breeding place for migratory birds and other wildlife...” Mud Island was added to Wyandotte NWR in January 2001 using the authority to accept donations of real property contained in the Fish and Wildlife Act of 1956 (16 U.S.C. 742f). The islands and shoals of the former Wyandotte NWR retain their original legislative purposes as well as gaining new ones from the 2001 legislation.

## Refuge Vision

A draft vision for the Detroit River International Wildlife Refuge was produced during a public comprehensive conservation plan workshop held in October 2002. Workshop participants first reviewed a vision statement for the Lower Detroit River developed in 2001 as part of a broad-scale partnership of Federal, provincial, and local governments, conservation groups, and industry representatives.

### **Vision Statement for Lower Detroit River Ecosystem (2001)**

“In 10 years the Lower Detroit River Ecosystem will be an international conservation region where the health and diversity of wildlife and fish are sustained through protection of existing significant habitats and rehabilitation of degraded ones, and where the resulting ecological, recreational, economic, educational and ‘quality of life’ benefits are sustained for present and future generations.”

### **Draft Vision Statement for the Detroit River International Wildlife Refuge**

“The Detroit River International Wildlife Refuge, including the Detroit River and Western Lake Erie Basin, will be a conservation region where a clean environment fosters the health and diversity of wildlife, fish, and plant resources through protection, creation of new habitats, management, and restoration of natural communities and habitats on public and private lands. Through effective

management and partnering, the Refuge will provide outstanding opportunities for “quality of life” benefits such as hunting, fishing, wildlife observation and environmental education, as well as ecological, economic, and cultural benefits, for present and future generations.”

## Purpose and Need For the Plan

This comprehensive conservation plan, or CCP, identifies the role the Refuge will play in supporting the mission of the National Wildlife Refuge System and provides guidance for Refuge management. The plan articulates management goals for the next 15 years and specifies objectives and strategies that will achieve those goals. Several legislative mandates within the National Wildlife Refuge System Improvement Act of 1997 have guided the development of this plan. These mandates include:

- # Wildlife has first priority in the management of refuges.
- # Wildlife-dependent recreation activities of hunting, fishing, wildlife observation, wildlife photography, environmental education and interpretation are the priority public uses of the National Wildlife Refuge System. These uses will be facilitated when they do not interfere with our ability to fulfill the Refuge's purposes or the mission of the National Wildlife Refuge System.
- # Other uses of the Refuge will only be allowed when they are determined to be appropriate and compatible with the Refuge purposes and mission of the National Wildlife Refuge System.

This CCP will enhance the management of the Detroit River International Wildlife Refuge by:

- # Providing a clear statement of direction for future management of the Refuge.
- # Giving Refuge neighbors, visitors, and the general public an understanding of the Service's management actions on and around the Refuge.
- # Ensuring that the Refuge's management actions and programs are consistent with the mandates of the National Wildlife Refuge System.
- # Ensuring that Refuge management is consistent with federal, state and county plans.
- # Establishing continuity in Refuge management.
- # Providing a basis for the development of budget requests on the Refuge's operation, maintenance, and capital improvement needs.

## Relationship to Existing Wyandotte CCP (2001)

A Comprehensive Conservation Plan for Wyandotte NWR was completed in September 2001, 3 months prior to the act that established the Detroit River International Wildlife Refuge. The Wyandotte NWR CCP presented a set of goals, objectives and strategies for long-term management of the existing 394-acre Refuge. The following CCP for the Detroit River IWR will incorporate a large portion of the material presented in the original plan. The scope of the Detroit River IWR is necessarily much larger than the former Wyandotte NWR. However, at the time of this writing, the three islands of the former Wyandotte NWR

still constitute most of the land owned by the Refuge. Specific strategies for managing Grassy, Mamajuda and Mud islands, including contaminant remediation, still apply to the new Refuge. Please refer to the Wyandotte NWR CCP for more specific information on these islands and future management.

## History and Establishment

The Detroit River is being recognized by many people as an asset to local communities and as an important natural resource in its own right. Recently, the Detroit River was designated as both an American and Canadian Heritage River, the first such international label. Today, we value the river for the many natural, recreational, and cultural benefits it



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provides. The river has not always enjoyed such a reputation. The Detroit River and adjacent portions of the western Lake Erie shoreline have experienced tremendous industrial development within the last 100 years. Widespread pollution, loss of coastal wetlands, and environmental degradation in general became a normal course of events as the Detroit region grew in population and industry. However, along with the coming of a new century, a new attitude toward the river is emerging within local communities.

Beginning in 2000, individuals as well as local, regional, state, and federal agencies in the United States and Canada came together to discuss the future of the Detroit River and its environment. This large-scale effort resulted in a binational conservation vision for the Lower Detroit River Ecosystem (MAC 2001). A principle element of this vision was to support specific legislation to create an International Wildlife Refuge to be managed in a partnership consistent with the vision statement.

The Detroit River International Wildlife Refuge was established by an Act of Congress, which became Public Law 107-91 on December 21, 2001. The authorized Refuge boundary includes islands, coastal wetlands, marshes, shoals and riverfront lands along 18 miles of the Lower Detroit River. The establishing Act included Mud Island, Grassy Island and Mamajuda Shoal, lands already managed by the Service as Wyandotte NWR (394 acres).

Wyandotte NWR was established by an Act of Congress in 1961. The Refuge was established as part of a negotiated agreement with the U.S. Army Corps. of Engineers on a 300-acre dredge spoil disposal area surrounding Grassy Island. Mud Island was added to the Wyandotte Refuge in January 2001 as a donation from National Steel Corporation.



*Great Blue Heron. USFWS*

## Refuge Expansion Act (2003)

On May 19, 2003, Public Law 108-23, the Ottawa National Wildlife Refuge Complex Expansion and Detroit River International Wildlife Refuge Expansion Act, was signed by the President. The Act extends the authorized boundary of the Refuge along the Lake Erie coastline west to I-75 and south to the Ohio/Michigan border. The expansion area encompasses more than 7,500 acres and numerous coastal marshes and sensitive wetlands that would be suitable as part of the Refuge. The Act could eventually result in a string of protected coastal areas extending along the entire Lake Erie Western Basin in Michigan and Ohio.

## Legal Context

In addition to the Refuge's establishing legislation and the National Wildlife Refuge System Improvement Act of 1997, several Federal laws, executive orders, and regulations govern its administration. A portion of the Refuge also operates under a Memorandum of Understanding between the United States Coast Guard and the Department of the Interior for

the management of navigational aids on Grassy and Mamajuda islands. See Appendix F for the full text of Public Law 107-91- the Detroit River International Wildlife Refuge Establishment Act, memorandum of understanding, and a list of the guiding laws and orders.