

# Chapter 5 Plan Implementation

## New and Existing Projects

This Comprehensive Conservation Plan outlines an ambitious course of action for the future management of the Ottawa Refuge Complex. The ability to intensively manage water impoundments, especially to benefit migratory birds, is relatively expensive. The Service will need to retain supplemental funding to implement many of the objectives in this plan. The following section presents a brief description of some of the highest priority Refuge projects, as chosen by the Refuge staff. The examples include requests for equipment, construction materials as well as new staff and visitor facilities. A full listing of unfunded Refuge operation projects can be found in the Appendices.



Photo by Sharon Cummings

### Ottawa National Wildlife Refuge Projects

**Visitor Education Center:** The Ottawa National Wildlife Refuge Complex, Ohio's only set of national wildlife refuges, is within a 2-hour drive for more than 8 million people. Construction of a visitor education center will allow increased opportunities for environmental education and recreation to visitors, schools and organizations. Programs and displays will focus on the importance of Lake Erie marshes, as well as Ottawa Refuge Complex and Service missions. An education/visitor center will help define the identity of the Refuge and increase public visibility and support.

*Estimated Cost:* \$4,500,000

**Invasive Plant Control:** This project will increase biodiversity and productivity of moist soil units and semi-permanent wetlands by reducing invasive pest species like purple loosestrife, reed canary grass and willow. Control will be achieved by purchasing herbicide and equipment, and by releasing and monitoring loosestrife-controlling weevils and beetles. This is a 5-year control effort.

*Estimated Cost:* \$75,000

**Habitat Restoration on Acquired Lands:** The Ottawa Refuge Complex expansion program begun in 1994 will eventually add 5,000 acres to the Complex. The newly acquired parcels will require habitat restorations, monitoring and boundary posting. The Refuge currently has 300 acres of new properties. Wetlands will be restored on acquired tracts where possible and



upland areas will be restored to habitat types outlined in the CCP. This project covers a 10-year period and includes personnel to complete restoration activities as well as to conduct baseline biological surveys.

*Estimated Cost: \$267,000*

**Volunteer Accommodations:** Volunteers provide a tremendously important service to the Ottawa Refuge Complex. Particularly during summer months, retiree volunteers are available for extended Refuge stays if campsites are provided to enable them to park an RV or trailer at the Refuge. This type of volunteer is particularly valuable to a refuge because of the expertise, work ethic and availability to complete extended projects. Four concrete pads, electrical hookups, water and septic tank will provide a suitable site. A suitable site for a parking area exists at the former Gaeth-Kurdy property.

*Estimated Cost: \$43,000*

**Heavy Equipment:** A single-axle dump truck is needed to maintain existing dikes and construct new dikes to maintain, enhance, and restore the present wetlands and moist soil units. Damage from high-water levels and wave erosion requires a constant program of adding gravel and rip-rap to existing dikes. A single-axle dump truck is necessary during repair work to haul gravel and rip-rap rock from the quarry to the job site. The truck will also be used to trailer equipment between off-Refuge job sites for the Partners for Fish and Wildlife Program.

*Estimated Cost: \$80,000*

**Visitor Trail Improvements:** We will improve Ottawa's trails and wildlife observation opportunities by paving the main visitor parking area, paving a one-quarter mile trail section, adding new accessible observation decks with spotting scopes, and replacing and upgrading interpretive signs along the trail.

*Estimated Cost: \$250,000*

**Shrub Habitat Restoration:** This project will enhance reversion of abandoned farm fields to scrub/shrub successional stages as outlined in the CCP. Weed control will be accomplished by spraying, mowing, and burning. Abandoned farm fields will initially be seeded to grasses to discourage weedy species from establishing. Shrubs from existing Refuge shrublands will be transplanted to speed restoration. This project will be conducted over a 10-year period to coincide with the phasing out of cropland on the Refuge.

*Estimated Cost: \$70,000*

**Refuge Geographic Information System (GIS):** The use of GIS in resource management has increased dramatically in the past 10 years. Vegetation mapping, waterfowl use patterns, water management trends, and innumerable other uses provide refuge managers with information to better manage refuge resources. A computer dedicated to GIS functions and a full time computer specialist to manage the system will enable Refuge staff to provide and access planning and scientific information to achieve station goals and objectives.

*Estimated Cost: \$147,000*



**Fire Equipment:** Ottawa National Wildlife Refuge will be revising its burn plan to include additional prescribed burning as a management technique on the Refuge. Additional equipment is required to increase the capabilities of the Refuge fire team. Unfunded needs include a pumper vehicle for suppression and control of fires, as well as equipment for all fire trained personnel on the Refuge.

*Estimated Cost:* \$42,000

**Fish Habitat / Access Investigations:** Lake Erie coastal wetlands have been degraded due to increased coastal development and erosion protection efforts (dikes). Fish access to these important spawning areas is severely restricted. This project will address this issue by investigating ways to improve habitat and fish access into wetlands. Fish movement and aquatic habitat components of open, impounded, and controlled wetlands will be monitored at Ottawa National Wildlife Refuge. The fish passage structure at Metzger Marsh will be monitored for effectiveness as well. Information gathered through these studies can be used as a guide for incorporating fisheries management in Ottawa's coastal wetland areas.

*Estimated Cost:* \$147,000

**Entrance Road Pull-outs:** Refuge visitation currently exceeds 100,000 and at times the main entrance road to the visitor parking area and Refuge Headquarters can become congested, especially when the marsh on the east side of the road has watchable wildlife. This road also leads to the maintenance yard and is the only way large dump trucks can get out to State Route 2 to the quarry and other Refuge units. Currently there are no areas for cars to pull off the road to observe the wildlife. Construction of two or three pull off areas on the entrance road would relieve some congestion and reduce the chance of accidents due to cars stopped in the road.

*Estimated Cost:* \$86,000

## Cedar Point National Wildlife Refuge Projects

**Dike Restoration:** This project will repair and rip-rap the north dike of the Cedar Point National Wildlife Refuge Pheasant Farm unit to allow complete water management and marsh restoration. The dike is currently severely eroded. Water levels cannot be raised as high as desired for effective water management and wildlife use without causing additional and severe damage to the dike. Cedar Point National Wildlife Refuge is an important foraging area for wading birds nesting on West Sister Island National Wildlife Refuge, as well as an undisturbed feeding, resting and staging area for migrating waterfowl.

*Estimated Cost:* \$84,000

**Road Improvements:** Gravel the roads in Cedar Point Refuge to allow law enforcement, biological surveys, maintenance activities, etc. during all times of the year and to protect the diketops from erosion and rutting.

*Estimated Cost:* \$87,000

In addition to the list of operation projects, the Ottawa Refuge Complex currently has 57 backlogged maintenance projects totaling \$8,482,000. More



than \$5 million is represented by four major dike restoration projects that would rebuild the dilapidated dike system in Crane Creek. Dike repair, equipment and building replacements make up the majority of the remaining funding shortfall. More than half of the total number of projects are estimated to cost less than \$50,000 each.

## Partnership Opportunities

Partnerships have become an essential element for the successful accomplishment of Ottawa Refuge Complex goals and objectives. The objectives outlined in this Comprehensive Conservation Plan need the support and partnership of Federal, State, and local agencies, non-governmental organizations, and individuals. The ecosystem approach to managing fish and wildlife resources extends beyond social and political boundaries and requires a broad base of support and diverse stakeholder strengths and interests. The Ottawa National Wildlife Refuge Complex will seek creative partnership opportunities to achieve its vision.

The Ottawa National Wildlife Refuge Association, a non-profit “Friends” organization made up of Refuge supporters, will become an increasingly important partner in the future. The Association is in its initial stages of organization but has already demonstrated its ability to reach out to the community for support and assistance for Refuge projects. Future partnerships can include advocacy for the Refuge, grant proposal assistance, public outreach, volunteer coordination, special event planning and staffing, and visitor center staffing and sales. Refuge staff will continue to work with the Association to provide guidance and direction for partnership needs.

## Step-down Management Plans

Step-down management plans describe specific actions required for the accomplishment of Refuge objectives. The management plans identified in Table 4 will be reviewed and revised as necessary to achieve the results anticipated in this Comprehensive Conservation Plan.

## Monitoring and Evaluation

The effectiveness of proposed management actions will be monitored throughout the life of this plan. Some specific wildlife and habitat monitoring strategies were described in Chapter 4. However, more details will be available in the forthcoming step-down biological inventory and monitoring plan.

Periodically, usually every 3 to 5 years, a Station Review Team will visit the Ottawa Refuge Complex and evaluate the current program. The team will consist of Refuge supervisors, program specialists and biologists from the regional office and other field stations. The team will review all aspects of



**Table 4 Step-down Management Plans**

<b>Plan</b>	<b>Date Revised</b>	<b>Objective</b>
Biological Inventory and Monitoring Plan	In Progress	Complete by end of FY 2000
Habitat Management Plan (Integrated Pest Management Emphasis)	In Progress	Complete in FY 2001
Public Use Plan	1980	Revise in FY 2000
Law Enforcement Plan	1990	Revise in FY 2000
Cultural Resource Management Plan	---	Complete in FY 2002
Water Management Plan	1995	Create annual work plan.
Hunt Management Plan	1995	Review annually; revise in FY 2001
Fire Management Plan	---	Complete by end of FY 2000
Cropland Management Plan	1994	Phase out by FY 2006
Fisheries Management Plan	1985	Revise in FY 2000
Wilderness Management Plan (West Sister Island NWR)	1981	Revise in FY 2001

Refuge management, including direction, accomplishments and funding. The goals and objectives presented in this CCP will provide the evaluation measure for the team.

## Plan Review and Revision

The CCP for the Ottawa Refuge Complex is meant to be a guide for Refuge Managers to use over the next 10-15 years. However, the CCP is also a dynamic and flexible document. Some of the management strategies discussed within the CCP have never before been used on the Refuge. Weather events, such as droughts, floods and windstorms, can drastically impact specific habitat management applications. Funding and personnel changes can also influence the amount and types of work that can be accomplished. Because of all these factors, the recommendations in the CCP will be reviewed periodically and, if necessary, adjusted to meet new circumstances. Whenever possible, specific objectives and strategies have built-in time frames that allow for these uncertain conditions. For example, the wetland habitat objectives were designed to be met on a 5-year average basis. The public will be notified through newsletters, media announcements or public meetings if a substantial shift in a management strategy is recommended after a periodic review of this CCP.



