

Little Darby Creek
Conservation Through Local Initiatives
Final Report

August 2002



United States Department of the Interior

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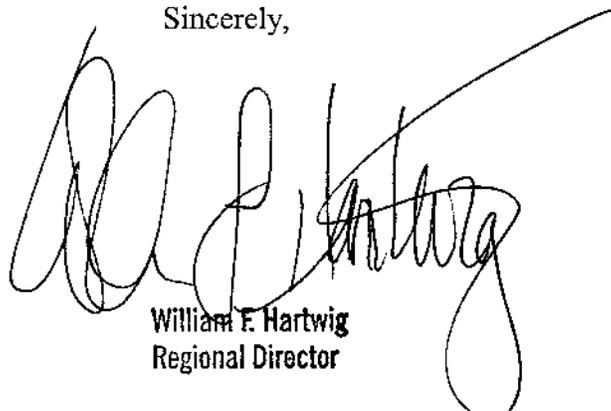
Dear Reader:

The document you hold in your hands is a product of collaboration. The U.S. Fish and Wildlife Service began studying the potential for a national wildlife refuge within the Little Darby Creek Watershed in response to interest from within the community. Our proposal to establish the refuge is ending with the community taking responsibility for local conservation initiatives rather than the creation of a new national wildlife refuge. We have heard many viewpoints from many people throughout this refuge proposal, and those views have culminated in a locally-driven approach to conservation. From refuge proposal to local conservation initiative, our desire has always been to work with the community and I believe we have accomplished that goal.

This report is unique within the Fish and Wildlife Service. We write many environmental impact statements and environmental assessments and a wide variety of planning documents, but we seldom have the opportunity to write a report that will be more useful to a community than it is to us. This report provides background on conservation within the Little Darby Creek Watershed, an outline of the area's history, and an overview of conservation efforts that have gone on in the past. Most important, it gathers information on a wide range of conservation resources that may be useful to residents of Madison and Union counties as they begin making decisions about the direction of future conservation efforts.

Some people say that government does not listen and does not care about communities. This final report, and indeed the entire planning process it stems from, says something different. In completing this final report, the U.S. Fish & Wildlife Service is saying that we have heard you and we acknowledge your commitment to local efforts to conserve agriculture and natural resources. This report is part of our commitment to the Service's mission of working with others to conserve, protect and enhance this nation's natural resources and reflects our belief in the resource values of the Little Darby Creek Watershed. I wish you great success with your future conservation efforts.

Sincerely,



William E. Hartwig
Regional Director

Acknowledgments

A proposal to establish the Little Darby National Wildlife Refuge did not result in a refuge. Our hope is that it resulted in something with even greater potential to benefit the natural resources of the Little Darby Creek Watershed.

The road to local conservation action has been long and sometimes bumpy. The U.S. Fish & Wildlife Service appreciates the time and energy so many people devoted by attending meetings and reviewing draft documents.

We are also indebted to the many individuals, elected officials and agency staff who spent time with Service representatives in July 2002 to share their visions of local conservation action. We thank Gretchen Green, Director of the Madison County Historical Society, and volunteers Charles Fisher and Pat VanHorn for their invaluable help in gathering information on Madison County's history.

Most of all, we thank in advance the people who will roll up their sleeves and begin the work that is inherent in a locally driven conservation effort. Here and across the nation, you are the backbone of conservation.

Little Darby Creek Conservation Through Local Initiatives

A Final Report

*Concluding the Proposal to Establish a National Wildlife Refuge on the
Little Darby Creek in Madison and Union Counties, Ohio*

August 2002

U.S. Fish & Wildlife Service
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Chapter 1: Introduction

Purpose of This Report

The Little Darby Creek Watershed is home to unique natural environments. For generations it has also been home and a livelihood to families that envision it remaining both home and income for future generations. For other families, it is a hometown atmosphere within commuting distance of Columbus. It is an important market area for agriculture and other businesses. These different characters were described many times in a variety of ways between 1997 and 2002 after the U.S. Fish and Wildlife Service (Service) proposed to establish a national wildlife refuge about 25 miles west of the City of Columbus, Ohio, in Madison and Union counties.

The refuge planning process confirmed a need for ongoing conservation and the feasibility of conservation efforts in the area, and it also underscored the community's desire for a local conservation approach rather than establishment of a federal wildlife refuge. In March 2002, Service officials concurred with that approach and withdrew the proposal to establish a refuge.

One of the cornerstones of the U.S. Fish & Wildlife Service's mission is to work with others to preserve and enhance habitat. This Final Report is intended to demonstrate the Service's commitment to that mission. Our intent is to share information collected in the environmental study process that could be useful to local conservation initiatives and to provide other information that may be useful to the community in making decisions about the direction of future conservation efforts. This Final Report has been prepared in the spirit of supporting local conservation efforts, not directing those efforts. We offer no recommendations, those are up to the community, but we describe many possibilities.



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The Little Darby National Wildlife Refuge Proposal

In 1997, the U.S. Fish & Wildlife Service announced that it would study the potential for establishing a new national wildlife refuge in Madison and Union counties in south central Ohio. Originally called the Darby Prairie National Wildlife Refuge, the proposed refuge included a small amount of land in

Champaign County. That portion of the project was later dropped and the proposed refuge was renamed Little Darby National Wildlife Refuge.

The four goals for the proposed refuge included:

- Long-term preservation and restoration of federally-listed threatened and endangered species in the Little Darby Creek Watershed.
- Long-term preservation and restoration of migratory birds and their habitats in the Little Darby Creek Watershed.
- Provide opportunities for wildlife-dependent public uses consistent with the refuge's natural resource preservation and restoration goals.
- Ensure that the overall watershed biodiversity and federal wildlife trust resources are protected and enhanced, while respecting agriculture as an existing and desirable land use that complements and enhances habitat restoration and long-term preservation in the core refuge Voluntary Purchase Area.

When it first proposed establishing a national wildlife refuge, the Service began work on an environmental assessment, or EA. A draft EA was released for public review in November 1999. Approximately 800 comments both for and against the proposed refuge were received during a 60-day comment period. Both before and during the comment period, citizens and government representatives asked the Service to complete an EIS. The Service's Regional Director decided to comply with the request, and a Draft EIS was released for 60 days public comment on July 28, 2000. Approximately 1,400 comments were received. Following the comment period, Service staff began revising the EIS to address the comments received.



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The draft EIS described a preferred alternative that combined restoration via federal acquisition of land and working with willing landowners on conservation techniques on private land. The Service's preferred alternative proposed a 22,783-acre voluntary purchase area within which the Service would buy land from people who chose to sell land (willing sellers only). The alternative also proposed a 26,419-acre Watershed Conservation Area where the Service would focus on using techniques other than fee-land purchase for conservation of agricultural land, including voluntary landowner cooperative agreements, purchase of development rights and technical assistance on conservation projects.

Public review of the Draft EIS, was completed in September 2000. In October 2000, members of the Ohio congressional delegation asked the Service to delay a final decision on the refuge until they had time to explore alternatives to the refuge. The Service agreed, and work on the EIS stopped.

Unlike other projects where there was opposition but little interest in preservation of the resources, many in the Little Darby community agreed that there were natural and agricultural resources to preserve but felt that a locally driven approach was the most appropriate.

When the refuge proposal was revisited in 2002, the frequently repeated interest in a locally driven approach convinced the Service to support local conservation efforts rather than continue to pursue a national wildlife refuge. Initially, Service staff contemplated finishing the EIS as a way of providing information and

closure on the proposal. We decided instead to prepare a Final Report that would compile information that may be useful to the community as it takes up the challenge of conservation planning. The Final Report was selected rather than completing the EIS because it could be prepared more quickly, more succinctly, and could better focus on key information that could be of use to the community.

Withdrawing the refuge proposal does not signify that the Service does not value the natural and agricultural resources of the Little Darby Creek Watershed. We believe that the outstanding quality of the Little Darby Creek merits protection, and we believe that there is great potential to benefit a wide variety of wildlife through conservation efforts implemented by local landowners and the local and state governments.



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Chapter 2: History of Service Involvement in the Area

The Service's interest in the Little Darby Watershed is based on both the qualities that remain in the watershed and the potential for habitat restoration. The area is widely recognized as being a unique natural area; the Ohio Department of Natural Resources declared the Creek a state Wild and Scenic River, a designation the creek has also received on the federal level through the National Park Service. The Nature Conservancy identified the Little Darby area as one of the "Last Great Places" in the Western Hemisphere.

The Darby Creek Watershed historically encompassed the easternmost wetland/tallgrass prairie/oak savanna ecosystems in the United States. This unique landscape was important for its abundant and diverse plant life and its grassland and wetland-dependent bird species. Less than 1 percent remains of the original prairie ecosystem that once spanned 25 million acres across the Midwest. Remnants of these habitats remain in the Darby Creek Watershed and in the area that was included in the refuge proposal.



USFWS Photograph by Tom Larson

Two federally-listed endangered species occur in the Darby Creek Watershed and the project area: the Clubshell and the Northern riffleshell, both of which are mussel species. As an indicator species that often foretells the health of an ecosystem, mussels have been a particular concern to the Service. In addition, several species of birds, plants, fish, reptiles and amphibians that have declined in population and are considered species of concern by the Service are located in the watershed area.

As the primary federal agency charged with conservation of natural resources, the Service has particular responsibility for certain species referred to as "trust species." Trust species include migratory birds, endangered species, interjurisdictional fish, and certain marine animals. "Trust resources" include lands administered by the Service, such as national wildlife refuges and waterfowl production areas. In the area where the refuge was proposed, the Service's trust resource responsibilities included interest in grassland, woodland, wetlands, migratory birds and endangered or threatened species.

As part of its ongoing involvement in wetland conservation, the Service has been interested in conservation within the Little Darby Creek Watershed for several years. In 1989, the Department of the Interior developed the National Wetlands Priority Conservation Plan. Development of the plan led to the development of the Regional Wetlands Concept Plan for the Great Lakes/Big Rivers Region in

1990. The Great Lakes/Big Rivers Region includes the states of Ohio, Illinois, Indiana, Iowa, Missouri, Minnesota and Michigan. The purpose of the plan was to identify wetlands that warranted protection in conformance with the Emergency Wetlands Resources Act of 1986. Restoration and protection of palustrine emergent and palustrine-forested wetland habitat within the Darby Creek Watershed was one of the recommendations in the Regional Wetland Concept Plan for the State of Ohio.



USFWS Photography by Tom Larson

In the 1990s, the Service was active in the Big Darby Creek Watershed through its Partners for Fish and Wildlife Program. The program works with individuals and groups to improve wildlife habitat on private land. As an outgrowth of Service interest in the watershed and work with the local groups and individuals, the Service began a study of the feasibility of a new refuge in the Little Darby Creek Watershed in 1998. The purpose of the proposed refuge was to protect and restore migratory birds and threatened and endangered species – our Service trust resources. In addition, Service interests were based on the significant biological diversity of the in-stream aquatic system, opportunities for grassland and wetland restoration that would support Service migratory bird objectives, and the relative threat to the aquatic resources.

The Refuge Proposal

From the beginning, the proposal to establish a national wildlife refuge inspired great unrest in Madison and Union counties.

Although the refuge was always proposed on a willing-seller-only basis, many people characterized the refuge as a “land-grab” attempt by the federal government. County and township governments passed resolutions against the proposal. Some people questioned the potential for wildlife disease to spread to domestic animals and people. Other people expressed an aesthetic preference for tilled fields over a natural landscape. Refuge supporters and opponents questioned each others motives for their positions. Lawn signs sprung up throughout the area, protesting the proposal and demonizing the U.S. Fish & Wildlife Service. The atmosphere was adversarial rather than conversational, and little constructive dialog ensued in open houses and meetings conducted throughout the planning process. Distrust was pervasive.

Through the public involvement and planning process, the Service identified a wide range of issues and opportunities ranging from farmland protection to preservation of endangered species. Various alternatives to resource preservation in the Little Darby Creek Watershed were considered in a draft environmental assessment and in a draft environmental impact statement. More than 3,000 comments were received on the two draft documents.

Decision to Withdraw the Refuge Proposal

In March 2002, the Assistant Secretary of the Interior addressed a letter to Ohio Congressman David Hobson and Congresswoman Deborah Pryce indicating that

the proposal to establish a national wildlife refuge had been withdrawn. In withdrawing the project, the Service acknowledged the local interest in developing conservation initiatives and offered to support those initiatives however that might be appropriate.

The natural resources of the Little Darby Creek and its watershed are unique for their quality and biological diversity. The area is threatened by future urban growth and its resulting loss of habitats and agriculture and associated pollution problems. While withdrawing the refuge proposal as the preferred alternative, the Service has an ongoing interest in the preservation of the natural resources, water quality, and rural character of the Little Darby Creek watershed. The Service believes that with a committed local citizenry, the unique features of the watershed can be preserved. This Final Report is a reaffirmation of the Service's belief that the Little Darby Creek Watershed is an area of significant natural and agricultural resource value.

Goals of This Report

Our goals in presenting this Final Report are to:

1. Reaffirm the Service's interests in the natural and agricultural resources of the Little Darby Creek Watershed.
2. Provide information that could be useful to the citizens of the watershed in implementing locally-driven conservation action.
3. Provide closure to the Service planning process, documenting the Service position on the project and basis for its decision
4. Provide closure for all stakeholders who have expressed interest in the proposal, whether for or against it.

When the Final Report is released to the public, a notice will be published in the Federal Register announcing its availability and confirming that the Refuge proposal has been withdrawn. The Federal Register is the official publication of the U.S. Government for printing notices, rule changes and other information related to government operations.

Chapter 3: Natural Resource Values of the Little Darby Creek Area

Natural History and Habitat Loss

Wet and Mesic Tallgrass Prairies

In Ohio, wet and mesic tallgrass prairies occurred primarily in the four main prairie regions: the Darby Plains, the Sandusky Plains, the Oxford Prairie, and the Grand Maumee Prairie (Anderson, 1983). Nearly all of these regions were in either the Till Plains or the Great Lake physiographic sections, but limited numbers also were reported from all the other physiographic sections in the state. Most of them occurred over till (e.g., the Darby Plains and the former project area) or mostly lacustrine deposits (e.g., the Sandusky Plains, Oxford Prairie and Grand Maumee Prairie).



USFWS Photograph by Tom Larson

All that portion lying east of Big Darby was heavy timber lands made up of walnut, ash, beech, white and black oaks, hickory, basswood, and white elm on the swampy lands. All that portion lying west of Big Darby and east of Little Darby, except a narrow strip near these streams, was known as the Darby Plains (Anderson, 1983). A more expansive area was also identified north and west of the Little Darby Creek (King, 1981).

Today there are almost no wet prairie stands remaining in Ohio. Most have been either eliminated or drained. Thus, most that do remain are either on sites that are drier than they once were, or they are in wet but tiny pockets. A more typical wet prairie habitat today, for instance, is the narrow, wettest portions of some roadside or railroad ditches. In some areas, species are now restricted mostly to prairie fens that have retained their spring-fed water courses. Some of the remaining wet prairies are only the more poorly drained portions of larger mesic prairies. For all practical purposes (e.g., inventory and preservation) in Ohio today, wet prairies might best be included under mesic prairies. The wet prairie category is retained, however, because it is vegetationally different, and because historically it was a very important prairie community in the state (Anderson, 1991).

The distribution of original Ohio prairies in relation to current soil distribution was analyzed by Steiger (1981). Based on soils data for 31 counties in western Ohio, he determined the extent of prairie-related soils in five topographic positions throughout that region. Of these soils, 80.4 percent occurred on “swampy uplands,” 10.3 percent on bottomlands, 5.8 percent on moist uplands, 2.2 percent in “bogs,” and 1.3 percent on draughty uplands. Swampy uplands were defined as mineral soils that are mainly Aquolls in which “The water table is near the soil surface during part of the growing season, but it is in the lower subsoil and

substratum during midsummer and fall.” The term “swamp” here referred to water conditions, not wetland forests. It is clear that permanently dry (i.e. unflooded) prairies were relatively uncommon. Prevailing prairies of the Darby Plains, including the area within the area that had been proposed as a national wildlife refuge, existed on the flat tablelands over heavy till and were probably quite wet, at least seasonally. Recent descriptions of the distribution of Ohio prairies include those of Forsyth (1978; 1981) based on geology, Ramey (1981a) based on geography, and Schneider and Stuckey (1981) based on place names. Many of the so-called “dry prairies” of tall grasses in the Darby Plains region in west-central Ohio likely were confined to certain well drained outwash and alluvial deposits along streams. Dry areas with tall grasses also occurred on drier uplands in that region, but these areas also supported thin stands of oaks and were commonly referred to as “barrens.”

Wet prairies, more commonly in the past, grade into emergent marsh and graminoid meadow communities. Many early writers, in fact, interchanged the terms “marsh,” “prairie” and “meadow.” The tall grasses, sloughgrass and reed may occur in both prairies and marshes, whereas bluejoint and sedges occur in both these and in graminoid meadows. Originally, the gradation among these three types was probably quite subtle (Anderson, 1991).

Within the original Refuge study area surrounding Little Darby Creek, approximately 40 percent of the area includes soil types prone to wetness. Historically, these areas were likely wet prairie and shallow wetlands.

Oak Savannas

An intact oak savanna in Ohio is a community of oaks and other less common tree species forming an incomplete cover over an understory of prairie species, usually mostly grasses. The common oak species present are bur oak (*Quercus macrocarpa*), white oak (*Q. alba*), post oak (*Q. stomata*), black oak (*Q. velutina*) and sometimes others. The qualifier “Intact” is used (as it was by Curtis, 1959) because, although a number of stands with oak overstories still remain in the state, those also containing natural understories are nearly gone. Only one remaining stand with sizeable portions of both components is currently known. “Oak savannas,” as used here, excludes open oak stands over loose sand and containing understories of prairie and other species characteristic of sandy sites. These stands, usually with black oak and sometimes white oak in their overstories, are separated here as “oak barrens.”



USFWS Photograph by Tom Larson

Oak savannas in Ohio and throughout the Midwest have undergone a massive decline. Though acknowledging the many problems in defining savannas, Nuzzo (1986) estimated that they may have once covered some 27 to 32 million acres in the Midwest. That figure included those stands identified as oak barrens in the current work. By 1985, the number of relatively high-quality stands had been

reduced to some 113 sites on 6,442 acres. That was about 0.02 percent of the original amount. All but 99 acres were on draughty, less usable substrates. No high-quality, intact, deep soil mesic savanna was known to remain.

In Ohio, a number of remnants of just the overstory trees remain, especially in the Darby Plains region, including the project area. Most all of these, however, were and often still are grazed and/or mowed to the point that they now retain few to no herbaceous prairie species. However, it is also acknowledged that these uses may have prevented some sites from succeeding to forest, or being tilled. Only one sizeable remnant, the W. Pearl King Prairie Grove in Madison County, is known to retain a substantial portion of its original understory. This site is located within the area proposed for the refuge.

Wetlands

When the Pilgrims landed in 1620, there were an estimated 221 million acres of wetland habitat present in the lower 48 states. Only 103 million acres, or 47 percent, remain today. Draining, dredging, filling, leveling, and flooding have reduced wetlands by 50 percent or more in 22 states, and 10 states have lost 70 percent or more (Dahl, 1990). Of the 5 million acres of wetlands that existed in Ohio prior to European settlement, less than 10 percent remain. Only a few of these support a broad representative array of plants and animals originally existing in this habitat.

The recent trend in wetland loss across America developed in three phases. From the 1950s to the mid-1970s, agricultural conversions accounted for 87 percent of all wetland losses. Much of this drainage work was subsidized with Federal funds to encourage increased production of commodity crops. From the mid-1970s to mid-1980s, wetland losses were more evenly distributed between agricultural land use and “other” land use with agriculture accounting for an estimated 54 percent of wetland losses. During this period, approximately 290,000 acres (Dahl, 1991) of wetlands was lost every year. Indications are that

wetland losses have slowed since the mid-1980s due to programs protecting wetlands as well as a growing public recognition of the values of wetlands.

Aquatic and Terrestrial Ecosystem

The Big Darby Watershed, including the area included in the former refuge proposal, at one time contained a tremendous diversity of terrestrial flora and fauna. Human activity over the last 200 years has had a devastating effect on these populations. The clearing and conversion of the watershed’s grassland, oak savanna, wetland, and forests, and the eventual installation of

drainage tiles greatly contributed to the elimination of many of these terrestrial plant and animal species. Bison and elk were once present in the watershed, with elk being present through the 1820s and bison being extirpated in 1803 (Anderson, 1991).



USFWS Photograph by Tom Larson

Early in the century, low input sustainable agriculture systems provided many of the fish and wildlife habitat elements in the watershed and the project area, such as shrub-fence rows and pasture/hayland. These were supportive and compatible with nongame migratory bird requirements and afforded greater protection for the in-stream aquatic ecosystems. In the last 40 to 60 years, high input production agricultural practices aimed at increasing crop volume have been cause for the elimination of the former natural habitat elements and land use conversions that require more intensive drainage. Recent soil conservation practices, such as no-till cropping, have been beneficial by reducing sediment loading but have not sufficiently addressed the long-term need to improve and maintain the terrestrial and aquatic ecosystem.

Biological Diversity

The Keystone Center (1991) defines biological diversity as the variety of life and its processes including the variety of living organisms, the genetic differences among them, and the communities and ecosystems in which they occur. Biological diversity can be considered at a minimum of four levels: the genetic level, the species level, the ecosystem level and the landscape level. In order to manage the biological resources of the watershed, it is convenient to work at the species, ecosystem, and landscape levels. For practical reasons, genetic diversity will be preserved and improved by managing at the species and broader habitat scales. To limit the complexity of the discussion, we will consider the various levels of biodiversity independently here.

However, the levels of biodiversity are inextricably interrelated on the ground. Species and their related populations are how we typically measure biodiversity and they historically represent the principal focus of wildlife managers.

Threatened and Endangered Species

Federally-listed endangered and threatened species within the area include the Northern Riffleshell and the Clubshell, both of which are mussel species. An additional 11 species in the Little Darby Creek Watershed area are federally classified as being monitored. The entire watershed supports 44 state-listed species, approximately 50 percent of these are in the project area. The bobcat and muskellunge have been verified to be present in the project area (Flint, S. 2000). Restoration of the wetland-prairie/oak savanna landscape and continued enhancement of Little Darby Creek riparian areas would also benefit other historically important and ecologically significant species.

Invertebrates

The U.S. Geological Survey (USGS) has identified 184 macroinvertebrate taxa within the Darby Creek watershed (USGS, Report 96-4315, 1997). Of these taxa, 35 had not been previously identified in the principal catalogs pertaining to the Darby Creek watershed. The major taxonomic groups identified were midges and other true flies (Diptera), caddisflies (Trichoptera), beetles (Coleoptera), mayflies (Ephemeroptera), and stoneflies (Plecoptera).

The Little Darby Creek supports a diverse mussel fauna composed of 35 species. The federally-listed endangered Clubshell (*Pleurobema clava*), Northern Riffleshell (*Epioblasma quadrula*) and the state-listed endangered Snuffbox

(*Epioblasma triquetra*), Elephant-ear (*Elliptio crassidens crassidens*) and Rabbitsfoot (*Quadrula cylindrica cylindrica*) are present. The federally-listed endangered Clubshell and state-listed endangered Rabbitsfoot were found living and reproducing in the Little Darby Creek Watershed at several sites, but nowhere else in the system (Watters, 1996). A survey of 100 sites in 1988, 1990 and 1995-96 found that the total number of species had declined from 38 to 35. Signs were noted that the fauna was declining, both in diversity and numbers of individuals (Watters, 1996). The 1996 survey conducted by Watters noted discernible declines from the 1990 sampling for the following mussel species: Northern riffleshell, Clubshell, Rabbitsfoot, Elephant Ear, Fawnsfoot, Lilliput, Paper pondshell, Purple wartyback, Slippershell, Snuffbox, and Wavy-rayed Lampmussel.



USFWS Photograph by Tom Larson

The Ohio Environmental Protection Agency (OEPA) has used numerical and narrative biological criteria based on fish and macroinvertebrates for quantitatively determining aquatic life use attainment/non-attainment since 1980. The ‘use attainment’ and associated indexes are measures of a stream’s biological health. For fish, the Index of Well-Being was the principal basis for determining use attainment. For macroinvertebrates, a system of narrative criteria was used that is based on specific macroinvertebrate community characteristics. These criteria and analyses are termed “Structural” in that they are based on community aspects such as diversity, numbers, and biomass.

More recently, measures that incorporated community “function” (i.e., feeding strategy, environmental tolerance, disease symptoms) have been incorporated into the program. For fish the Index of Well-Being was retained in a modified form (Modified Index of Well being, MIWB) and the Index of Biotic Integrity (IBI) (the maximum score is 60) was added. For macroinvertebrates the Invertebrate Community Index (ICI) supplanted the narrative evaluations (OEPA, Biological Criteria, 1988).

The OEPA has reported that the application of these methods and criteria have been tested over a wide range of surface water body sizes and types, and a wide range of physical and chemical conditions in Ohio and elsewhere. More than 330 rivers and streams covering more than 5,300 stream miles have been biologically evaluated by OEPA since 1979. This has included impact assessments for more than 700 point source discharges, a wide variety of nonpoint source influences, combined sewer overflow and storm water discharges, sewage plant bypasses, accidental spills, and previously unknown or unregulated discharges.

Macroinvertebrate community sampling by OEPA at a trend site on U.S. 42, River Mile 15.3 Little Darby Creek, for the years of 1979, 1983, 1990, and 1992 has “consistently failed to perform at exceptional levels and have yet to achieve Invertebrate Community Index scores supporting the Exceptional Warm water Habitat aquatic life use designation in the Little Darby Creek.” Their observation of embedded substrates at this site over the years suggest a long-term sedimentation problem originating from upstream sources in the watershed (OEPA, unpublished report, 1992-93). This reference location is above the Village of West Jefferson and is within the refuge study area.

Fish

An estimated 94 fish species are found in the Darby Creek Watershed, including 15 hybrids (OEPA surveys, 1979-1998). The OEPA has reported that the Little Darby Creek sub-watershed has 64 species, including six hybrids. Nine species are classified as either state-listed endangered or threatened, one federally-listed endangered, and four are designated as state special interest within the watershed. Only two state-listed threatened species exist downstream in the Little Darby Creek from the project area.

In 1988, the OEPA reported that the fish communities in the Little Darby Creek ranged from good to exceptional with Index of Biotic Integrity scores of 44 at the upstream monitored site, River Mile 3.7, and 52 at the downstream site, River Mile 0.5, sites lying downstream from the project area. It also indicated that the upstream site had been channelized in the past and that although it is almost recovered, it still did not have the development of a natural stream, i.e., pool depth was reduced and had lower variety of depths than in a natural stream. Based on the work conducted in 1988, OEPA recommended that the Little Darby Creek be designated Exceptional Warm Water Habitat (EWWH) and State Resource Waters even though the headwaters attained the lesser Warm water Habitat use rating.

Follow-up sampling was conducted in the Little Darby Creek watershed by the OEPA in 1992 and 1993.

In 1992 all sites sampled, with the exception of the site at Wing Road immediately downstream from the Mechanicsburg Wastewater Treatment Plant, either exceeded the Exceptional Warm Water Habitat criterion or were in the range of insignificant departure from the Exceptional Warm water Habitat criterion for the Index of Biotic Integrity...The rate of improvement in fish species downstream from the wastewater treatment plant appeared to be delayed by the numerous livestock operations in the middle portion of the mainstem within the project area...In 1993, sites immediately upstream and downstream from the wastewater treatment plant did not meet Exceptional Warm Water Habitat criteria.

Index of Biotic Integrity trend data for the Little Darby Creek between River Mile 33 and River Mile 41 (partially within the project area) suggests a general decline from the Exceptional Warm water Habitat range of 46-50 to a lesser rating of 39-44 between 1992-1997 (OEPA, unpublished report, 1992-93. Supplemental IBI Data).

Spring Fork yielded a mean Index of Biotic Integrity of 58 at River Mile 0.9, among the highest Index of Biotic Integrity scores recorded in the state. The OEPA further reported that the extremely high quality of this tributary and the stream that it confluences with (Little Darby Creek) deserve the maximum protection possible under the law (OEPA, unpublished report, 1992-93).

The Little Darby Creek drainage has remained in good to excellent condition for the survival of fish. One of the hydrologic characteristics that has contributed to this prevailing condition is the influence of direct groundwater augmentation. Another factor that has led to this condition is relatively stable land use in the sub-watershed. During the past 8-10 years, surveys by the OEPA have inferred

that fish population data have supported its designation as Exceptional Warm Water Habitat. The Service generally agrees with this assessment.

The IBI and MIWB have held moderately stable for the past 8 years. Upon more detailed review, however, both indices reflect variability throughout the sampled stream reach. By comparing the data with the relative forest cover in the riparian zone, however, there may be a correlation between the amount of forest cover or riparian zone protection and the variability. Generally, forest cover in the riparian zone may be one major factor that improves both indices at river mile 15.3 (Rte. 42 and downstream from the proposed refuge boundary) for all years sampled. Another consideration is that Spring Fork flows into Little Darby Creek just above mile 15.3. This sampling point portrays a picture of little variability in the range of scores; and all scores are tightly packed within the EWWH threshold. Scores for all years at that sampling point indicate a much more stable fishery than at points further upstream.

The riparian zone forest cover generally increases from river mile 20 to 15.3. Conversely, from approximately river mile 20 to 33, riparian zone forest cover is sparse to nonexistent. The indices may reflect this condition with declining and more variable scores. In addition, "significant" departures in the MIWB are noted from river mile 28 to 34. Some of the upstream variability in scores may also be due to past stream channelization efforts in those upper reaches.

Amphibians and Reptiles

Conservation biologists are increasingly concerned about Herpetofauna (Blaustein, Wake, and Sousa 1994), which includes amphibian and reptile species. Reptiles and amphibians are particularly important and sensitive because of their restricted ability to migrate and colonize new areas. Thus, their populations are dependent upon the presence of an interconnected mosaic of aquatic and terrestrial habitat. Amphibians are perhaps more sensitive in this regard than reptiles. Although we do not completely understand the apparent decline of certain amphibian populations, habitat loss and fragmentation may play an important role. Wetland protection and linkage of isolated wetlands into a landscape complex in the Basin could be important for the long-term survival of some amphibian species located in the Little Darby Creek. The Eastern hellbender and Eastern massasauga are listed as being federally monitored. These are candidate species of concern to the Service that could become candidates for threatened or endangered listing in the future. Although not specifically identified in this locale, some experts believe that the Kirtlands snake, a state-listed threatened and federally monitored species, might be present because of its spotty range throughout the state (Wynn, 1999).

Birds

Recent declines in grassland birds have corresponded with dramatic shifts in agricultural land use (Herkert, 1991, Knopf, 1994). Modern agricultural practices have resulted in a shift from small grains to rowcrops (corn and soybeans), larger farm and field sizes, decreased landscape and crop diversity, increased use of pesticides and other agricultural chemicals, and declines in acreage devoted to pasture and hay (Farris and Cole, 1981). Species impacted by these changes include the least bittern, American bittern, sedge wren, vesper sparrow, and grasshopper sparrow, all of which currently breed in the watershed (Peterjohn

and Rice, 1991). Other species that have been negatively impacted by grassland trends include the prothonotary warbler, dickcissel, Henslow's sparrow, eastern meadowlark, bobolink, and loggerhead shrike. A total of 13 species of nongame migratory birds and five game species that are either present or marginally present in the project area are on the list of the Service's regional conservation priorities (Appendix A, Table 1). The project's focus on grassland bird species is consistent with the Partners in Flight Program's similar emphasis on grassland birds in the historic prairie region of the Midwest, including the proposed Little Darby National Wildlife Refuge.



The 1995 National List of Species of Management Concern contains 122 species and documents habitat loss as the primary threat to 80 percent of those species (Office of Migratory Bird Management, 1995). Of 11 species of grassland nongame migratory birds surveyed by the Service between 1966-91, declines were noted in 10 species. The population trend in Ohio for each of these species exhibited declines much greater than those reported in the national trend (Swanson, 1996).

Ohio has lost more than 90 percent of its presettlement wetlands, including riverine types, primarily through conversion. Waterfowl and waterbird populations have declined in proportion to this loss. Waterfowl habitat in Ohio is scarce and rarely exists on a large enough scale to provide extensive habitat benefits. In some cases, habitats do not conform with historic locations of prime waterfowl habitat.

The state-listed endangered osprey is reported to be present in the watershed during the summer period (Peterjohn and Rice, 1991). Other personal observations have verified its presence (Flint, S., 1999).

Mammals

The mammals of principal concern within the Darby Creek Watershed and project area are those historically associated with grassland ecosystems and, therefore, several occur at the edge of their ranges. The Ohio state list for the watershed includes one mammal as a special interest species, the American badger (*Taxidea taxus*). The federally-listed endangered Indiana bat (*Myotis sodalis*) has been reported to occur in the watershed but not recently verified. The following state-listed endangered species have historically been present within the watershed: bobcat (*Lynx rufus*), and northern river otter (*Lutra canadensis*). The presence of bobcat has been recently verified (Flint, S., 2000).

Chapter 4: The Changing Environment

The size, distribution, and age of the population of Madison and Union Counties is changing. Over the last 200 years, the non-Native American population has grown from zero to over 40,000 residents in each county in the year 2000.

Figure 1: Madison County Population Change 1800-2000

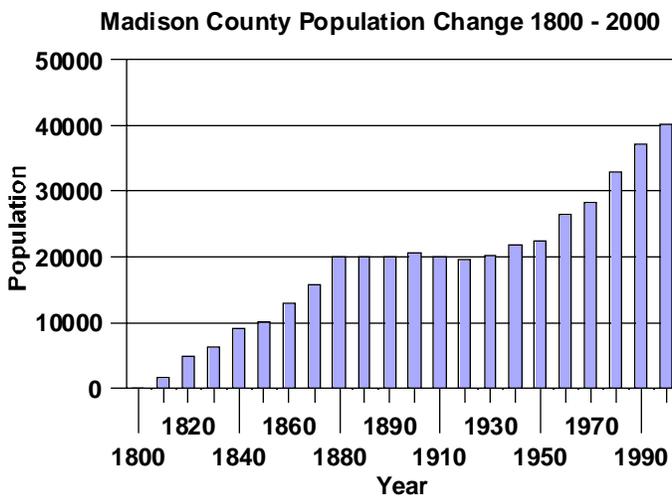
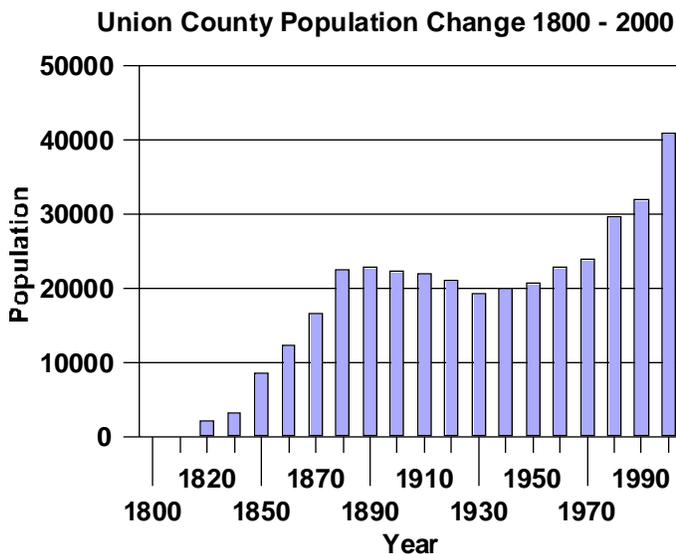


Figure 2: Union County Population Change 1800-2000



Occupations have changed from hunting and fishing to subsistence agriculture to modern agriculture, manufacturing, and service sector jobs. Figures 1 and 2 and Table 1 show how the population of Madison and Union Counties have changed between 1800 and 2000.

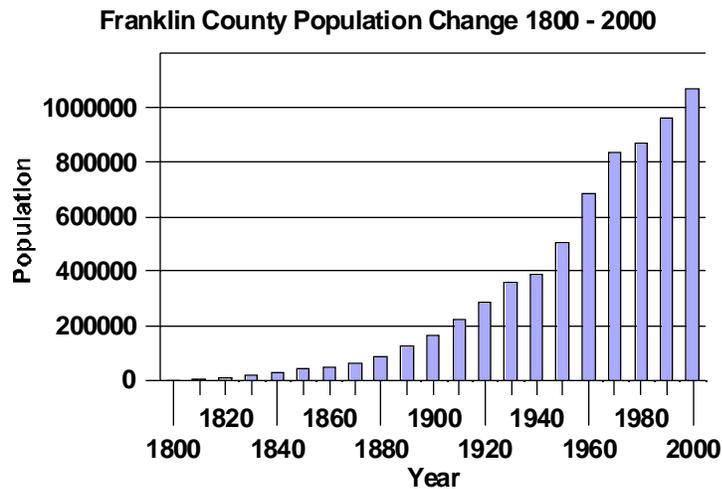
According to the Ohio Farmland Preservation Task Force Report of 1997, Ohio is among the top six states in the nation in land area consumption per citizen. The report states that rapid increase in growth outside Ohio's cities strain "the economic and environmental fabric of rural communities." The rural communities face development and social change.

The average age of the farm population appears to be increasing, while the number of full time farms is decreasing. Nationally, the average age of farm operators is increasing. According to the United States Department of Agriculture's 1997 Census of Agriculture, the average farm operator in Ohio was 53 years old in 1997. This compares to the median age of all residents in Madison and Union Counties of approximately 35 years old in 2000. According to the same survey, the number of full time farms in Madison and Union Counties decreased from 1992 to 1997 by 4 and 9 percent respectively, although the land in farms remained about the same in Madison County and decreased by 8 percent in Union County. As the older farm operators retire, their farms will be transferred to family members or sold to other individual farmers, corporate farms, developers, or sold in pieces to individuals looking for their own piece of rural America upon which to build their new home.

The Ohio Office of Strategic Research in April of 2000 projected population increases from 2000 to

2015 for Madison and Union Counties at 18 percent and 29 percent respectively. According to data from the Ohio State University Exurban Change Project, the amount of urban land in Madison and Union Counties has increased in the period 1982 through 1997 by 38 % and 60% respectively. During the same time the amount of forest land and farmland has decreased by 3.3% and 3.9 % respectively in Madison County and by 14.8% and 4.9 % respectively in Union County. According to Census data, Madison and Union had 1,577 and 2968 farms in their respective counties in 1930. By 1997 the number of farms had been reduced to 680 and 830 respectively. While the average size of each farm has increased in recent decades, the total acreage in farmland has fallen from 278,043 acres and 260,068 acres in Madison and Union Counties respectively in 1950 (U.S. Census data) to 259,000 acres and 228,000 acres in each county in 2000 (2000 U.S. Census data).

Figure 3: Franklin County Population Change 1800-2000



Contributing to the growth and development of Madison and Union Counties is the Columbus metropolitan areas immediately to the east. The Ohio Office of Strategic Research has cited it as the fastest growing multi-county metropolitan area in the Ohio, growing about 1.2 percent a year. Franklin County, on the west side of Columbus and the immediate neighbor to the east of Madison and Union Counties, added more people than any other Ohio country during the nine-year period from 1990 to 1999. The growth of Franklin County is reflected in Figure 3 and Table 3.

Over the past several years it is not difficult to find articles in the local Madison and Union County newspapers related to development and the changing nature of the two counties. Housing development proposals, landfill placement, sewage plans, annexation of land by communities, large confined animal operations, and road improvements have all been subjects of articles in the past few years.

The growth of the populations in Madison and Union Counties, declining numbers of farms and farmland acreage, and increasing development is changing the two counties from a landscape dominated by farms and natural areas to a mix of small acre-

Table 1: Madison and Union County Population Change

YEAR	Madison County Population	Union County Population
1800	0	0
1810	1603	0
1820	4799	1996
1830	6190	3192
1840	9025	8422
1850	10015	12204
1860	13015	16507
1870	15633	18730
1880	20129	22375
1890	20057	22860
1900	20590	22342
1910	19902	21871
1920	19662	20918
1930	20253	19192
1940	21811	20012
1950	22300	20687
1960	26454	22853
1970	28318	23786
1980	33004	29536
1990	37068	31969
2000	40213	40909

**Table 2: Franklin County
Population Change**

Franklin County	
YEAR	POPULATION
1800	0
1810	3486
1820	10292
1830	14741
1840	25049
1850	42909
1860	50361
1870	63019
1880	86797
1890	124087
1900	164460
1910	221567
1920	283951
1930	361055
1940	388712
1950	503410
1960	682962
1970	833249
1980	869132
1990	961437
2000	1068978

ages with individual homes, fewer but larger farms, and expanding urban areas with expanding manufacturing and service industries. Along with the many changes occurring in the Little Darby Creek area come the potential for such problems as increased runoff, increased lawn chemicals, increased sediment runoff, loss of remnant forest, grassland, and wetland areas, and loss of the rural character of the area. The unknown is how far will this change go? Will the landscape become a predominantly urban landscape or will the rural character, natural resource values, and life style that residents currently enjoy be retained? Change is a normal part of the natural and the human-modified world. The question is will it be a change that the community directs through wise planning and timely action?

Chapter 5: Historical Review of the Little Darby Creek Area

It is said that to know where you are going, you must know where you have been. The history of where the residents of Madison and Union Counties have been is very important to them. There is great pride in the multi-generational ties to the land that many families in the area have. Any proposal that suggests a major change in land use or ownership is of keen interest to the residents. Therefore, recognition of the significant ties to the land is important to understand the strong emotions that tie residents to the area.

Prior to European settlement, the Little Darby Creek area was mixture of prairie, wet meadows, shallow wetlands, oak savanna, and riverine forest. The area was used by many native American tribes. By 1650 the Iroquois Indians began pushing into the area that was known as the Ohio country (most of Ohio and parts of western Pennsylvania, western West Virginia, and eastern Indiana). They conquered and drove out the Algonquian Indian tribes living in the Ohio area. Although the Iroquois never lived in Ohio for extended periods, they did come to the area to hunt. During their dominance, many other tribes were hesitant to live in the area without permission of the Iroquois.

In 1748, several wealthy Virginians, including George Washington, established the Ohio Company. They received a grant of 200,000 acres from England near the headwaters of the Ohio River to distribute the property among 100 families and to build a fort to guarantee the colonists' safety. The Ohio Company investors focused upon settling south and east of the Ohio River in what is modern-day Pennsylvania and West Virginia. The French, having claimed the Ohio country as their territory, felt threatened by the Ohio Company's venture. In July 1754 a combined force of French soldiers and their Indian allies attacked a fort that George Washington had built in the area to challenge dominance of the area. The French assault and capture of the fort contributed to the start of the French and Indian War (1756-1763).

Over the next nine years France and England fought for control of North America. The Indians of the Ohio region generally sided with the French. Most tribes feared that an English victory would unleash the two million British colonists east of the Appalachian Mountains in a rush to settle the lands north of the Ohio River. Following the British defeat of the French, the Treaty of Paris in 1763 gave the Ohio country to the British. Ohio's Indian tribes did not agree.



USFWS Photograph by Tom Larson

Fearing a flood of settlers moving west into the Ohio country, Chief Pontiac, a leader of the Ottawa Indians, attempted to form a native confederation to stop the westward flood of British colonists. Pontiac's attempt to drive the Europeans from North America failed but it prompted the British government to implement the Proclamation of 1763.

The Proclamation of 1763 forbade English colonists to live west of the Appalachian Mountains. Any settlers west of the mountains were to move back east. England implemented the proclamation for two reasons. First, England hoped to prevent further conflicts with the Native Americans. The British government

could not afford to keep a military force in the New World to protect the colonists. Second, England hoped to tax the colonists because of its serious financial straits. Colonists west of the Appalachians were out of reach of the tax collectors.

While the Proclamation of 1763 did improve England's relations with the Ohio country natives, it angered the colonists who interpreted the act as England's lack of concern for the colonists' needs.

Colonists moved into the Ohio country prior to 1776 in spite of the Proclamation. Although few in number, their arrival was the precursor to the larger westward movement that was to come. The Proclamation of 1763 remained in effect until the Americans declared their independence from England in 1776. The Treaty of Paris in 1783 formally ended the American revolution. The Indians of the Ohio country took no part in the treaty negotiations and the British did nothing to protect their former allies. Through this treaty the United States acquired the Northwest Territory from Great Britain. This area encompassed today's states of Ohio, Michigan, Indiana, Illinois, Wisconsin, and parts of Minnesota.



USFWS Photograph by Tom Larson

By 1785, Congress needed to set up an orderly system for settling the Northwest Territory. The Land Ordinance of 1785 was passed to do this. The ordinance called for the land to be surveyed and divided into townships. Each township would be 6 miles square. Each township would have 36 sections. A section was one square mile and contain 640 acres. Congress planned to sell sections to settlers for \$640 each. Also, one section in every township was to be set aside to support public schools. However, the various survey districts or land grant areas that Ohio was divided into were surveyed at different times. The Little Darby area fell into the Virginia Military District and was surveyed using the older survey procedures of Virginia.

A series of wars between the various tribes of the Ohio country and the settlers was finally resolved with a decisive victory by General Anthony Wayne at the Battle of Fallen Timbers in 1794. On August 3, 1795 the Treaty of Greenville was signed by the Wyandot, Delaware, Shawnee, Ottawa, Miami, Chippewa, Potawatomi, Wea, Kickapoo, Eel River, Piankashaw, and Kaskaskia tribes. The Treaty of Greenville marked the end of the Indian Wars in Ohio. Through the treaty, the Indians gave up their claim to the lands east and south of a boundary line beginning at the mouth of the Cuyahoga River and running south to Fort

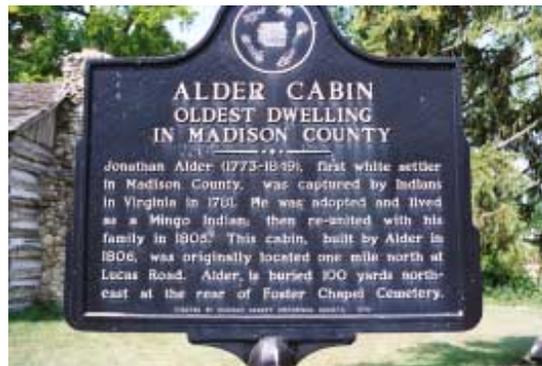
Laurens (south of modern Canton, Ohio). From there the boundary line turned west to Fort Recovery.

The Little Darby Creek area fell south of the Greenville Treaty line and so was open to settlement. The first white settler in Madison County was Jonathon Alder. Alder had been captured by Indians when he was 8 years old and grew up among them in the headwaters area of Big Darby Creek. In 1805 Alder returned to visit his mother and brother in Virginia. When he returned to the Darby area in 1806, many of the Alders living in Virginia returned with him.



USFWS Photograph by Tom Larson

Ohio became a state in 1803. In 1810 Madison County, Ohio was ordered to be surveyed and the county was established. In the early years of settlement malaria and typhus were said to be common. A map by Richard Lewis and Walter Dawley compiled from original unpublished records and documents of the principal surveyor of the Virginia Military District (which Ohio was part of), shows many of the Indian towns, villages, and trails that existed in southwestern Ohio from the 1770's into the 1790's (Figure 4). On the map, the Little Darby Creek area is notable for its lack of trails and villages. At the time, approximately one-third of the county was covered by prairie, often associated with wet soil types. The wet soils found in the area suggest that much of the Little Darby area was wet prairie, shallow wetlands, oak savanna, and riverine forest. In the Little Darby Creek area, approximately 40 percent of the area includes wet soil types. These conditions would have made poor village sites and would have made travel throughout the area difficult.

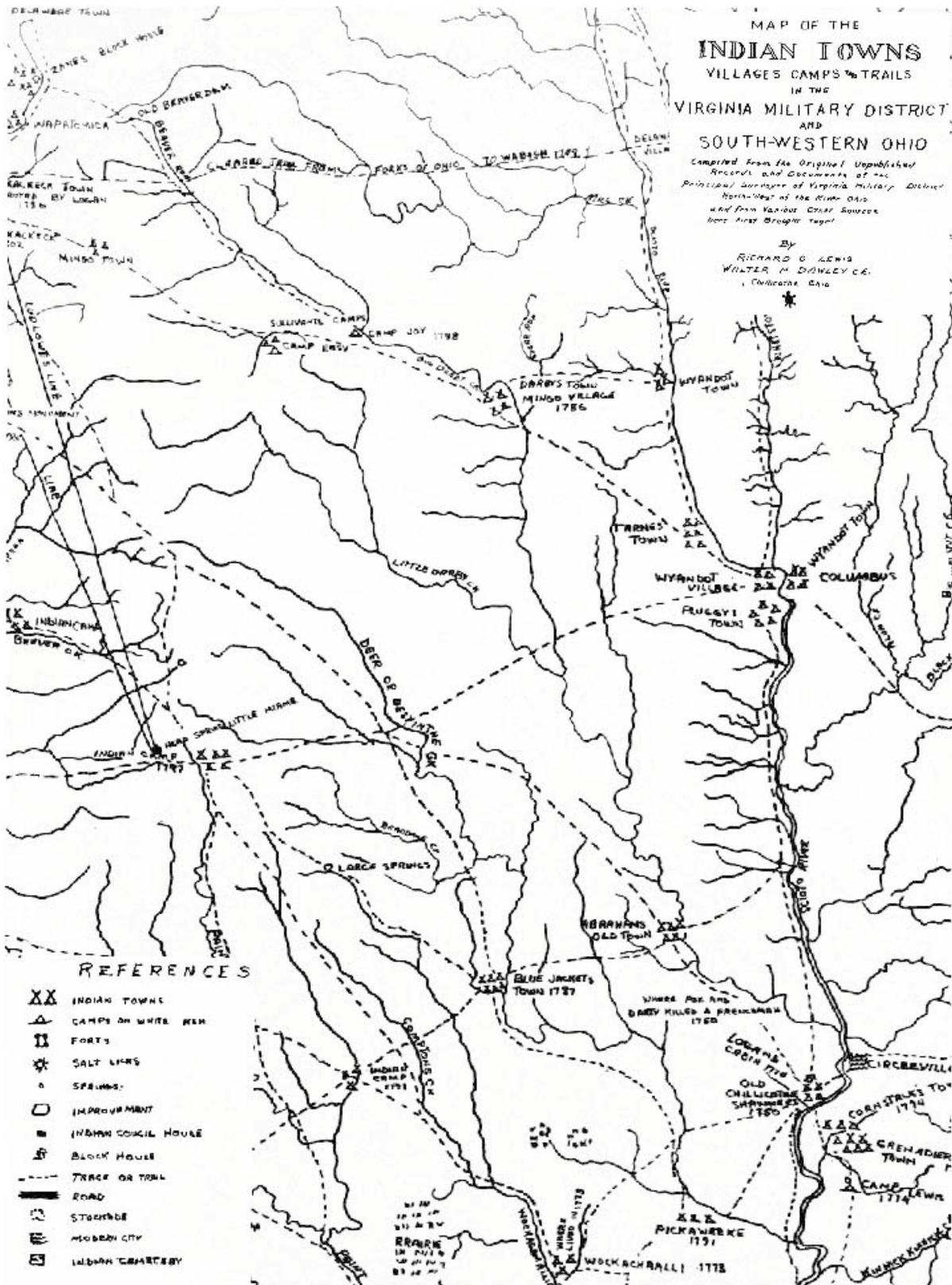


USFWS Photograph by Tom Larson

The many springs in Madison County were a draw to early settlers. Early agriculture in the area was a mix of crops, cattle, chickens, and dairy. As American frontiersmen moved into the Ohio country onto lands claimed by the British, the British and their Indian allies fought back. This led to the War of 1812 between the United States and Great Britain. The war ended with the signing of the Treaty of Ghent in 1814. Through a series of treaties between 1814 and 1833 the majority of the remaining Indians in Ohio relinquished their rights to lands and moved to reservations in the West. The abandonment of the Wyandot reservation at Upper Sandusky Ohio, in 1842 marked the end of organized tribal life in Ohio.

In 1770, the State of Virginia had claimed the area that became Ohio. Virginia established the Virginia Military District between the Scioto and Miami Rivers, including the Little Darby creek area. As compensation for fighting in the Revolutionary War, many veterans of the Virginia and Maryland militias received allotments of land. After Virginia had distributed the land that the veterans wanted, the balance of the unclaimed lands were turned over to the United States government. In 1852 and 1871, these lands were turned over to the State of Ohio.

Figure 4: Historic Map of Indian Towns and Trails



In 1806, President Thomas Jefferson authorized construction of the nation's first federally funded interstate highway. Known as the National Road, it stretched from Cumberland, Maryland through Pennsylvania, West Virginia, Ohio, Indiana, to Vandalia, Illinois. The road was completed in Deer Creek Township of Madison County in 1836-37. Originally part of the Cumberland Trail and following the current route of U.S. Highway 40 that passes through central Madison County, it helped bring new settlers to central Ohio.

Drainage of the wet prairies and wetlands of the Little Darby Creek area began as settlement progressed in the late 1800's into the 1900's. Deposits of clay in the area facilitated the development of tile manufacturing plants. The use of tile improved drainage over what had been attained through ditching. As tiling progressed the land devoted to crops increased while pasture and grassland for grazing livestock decreased. As technology changed from clay tile to plastic tile, drainage became easier and more effective. The landscape gradually changed to the landscape of today, an area dominated by row-crop fields, with remnant areas of forest along Little Darby Creek, and small, scattered areas of oak savanna and prairie. Old-growth oaks, remnants of the historic oak savanna, can still be seen standing alone in some fields. Small prairie remnants notable in their plant diversity can still be found in the Smith and Bigelow Cemeteries in Pike and Darby Townships in Madison County.



USFWS Photograph by Tom Larson

The residents of the Little Darby Creek area are proud of their long agricultural tradition and ties to the land. Some residents of the Little Darby area can trace their ancestry to those early military land grants. Farms that have been handed down from generation to generation are not uncommon in the area today. The local residents are also proud of their stewardship of the land.

A common concern expressed by many residents is that the rural landscape may be disappearing, overwhelmed by an expanding population and associated development. The future always includes change just as the Little Darby Creek area of today has changed from the time of Jonathon Alder. What the future holds is dictated by what is done today. Today is the first day of tomorrow. The residents of the Little Darby Creek area are at a crossroads in the continuum of change that their ancestors started 200 years ago. As we can see from the history of the Little Darby Creek area, a single day or event can be decisive in molding the future of an area.

Residents of the area today will determine what the landscape will be like in another 200 years and what those decisive events will be.

Chapter 6: Past and Present Conservation Efforts

Several programs have and are being used in the Little Darby Creek Watershed to benefit conservation of the natural and agricultural resources. The following is a brief discussion of some of those programs and efforts. More details on the program can be found later in this report under Resources Available To Assist Local Conservation Efforts.

1. County Planning

Madison County adopted a Farmland Preservation Plan and associated revised Comprehensive Land Use map in 1999. The Farmland Preservation Plan is part of an overall revised land use plan. The Farmland Preservation Plan is unique in that it provides a general assessment of issues and potential impacts to agriculture in the county and proposes a direction to protect agricultural lands.



USFWS Photograph by Tom Larson

On May 1, 2002 the Madison County Commissioners adopted revised zoning regulations for the County. Some have praised the regulations as being some of the strongest in Ohio. However, not all townships within the Little Darby Creek Watershed are governed by any county zoning regulations. Cities and villages (incorporated areas / municipalities) in Ohio have the authority to administer zoning. They must do this according to the Ohio Revised Code (ORC) unless they have adopted a charter, which can give the municipality broader zoning and other powers. Charter communities may fashion zoning regulations that vary from (but cannot violate) the ORC. Townships administer zoning in unincorporated areas (outside incorporated cities and villages) unless the township has voted to let the county administer zoning, which is called county zoning. Approximately 16% of counties in Ohio have county zoning in at least one township. Both townships and counties must administer zoning according to the ORC.

The revised Madison County zoning regulations create 11 zoning districts that cover agriculture, and various levels of development. However, there is no zoning district that is focused upon natural resource conservation such as along river corridors or where larger forested areas exist. For example, as a result of the designation of the Big and Little Darby Creeks as state scenic rivers, specific State rules apply to activities occurring within those designated corridors. This is not cited in the revised zoning regulations.

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Union County presently has no farmland protection plan but did update its Comprehensive Plan between 1997 and 1999. Comprehensive Plans define

community development goals and priorities – where, how, and when a community will grow – and spell out the tools necessary to reach the goals. Union County has no county specific zoning.

2. Joint Board of Soil and Water Conservation Districts (SWCD) Supervisors Watershed Planning Effort

Within the past two years, all six counties in the Big Darby Creek Watershed agreed to develop a watershed plan that would ultimately guide conservation and related land use planning efforts throughout the watershed. The general purpose was exemplary - to consolidate watershed-wide efforts and give uniform direction for conservation practices to all counties. In addition, the plan would include a strategy for achieving mandated USEPA Total Maximum Daily Load requirements. The respective Soil and Water Conservation District (SWCD) Boards applied for and received a U.S. Environmental Protection Agency (USEPA) Section 319 grant under the Clean Water Act of 1972, as amended, to hire a watershed coordinator. The role of the coordinator was to develop a process for plan development, and formulate a plan for implementation. A diverse group of residents, SWCD professionals, the Ohio State University Extension personnel, and selected interested parties were assembled and through appointed committees, charged with developing a plan for the residents within the watershed. As of July 2002, progress on the initial data collection phase was limited and the watershed coordinator had resigned.



USFWS Photograph by Tom Larson

3. Ohio Department of Natural Resources

The ODNR, Division of Wildlife provides cost sharing assistance for the restoration of native grasslands and wetlands throughout the state. The program is delivered independently and in cooperation Soil and Water Conservation Districts and the U.S. Fish and Wildlife Service's Partners for Fish and Wildlife Program. To date very few projects have been instituted in the original Service refuge project area. Watershed-wide project interest has been limited as well.

Ohio Division of Natural Areas and Preserves

The ODNR, Division of Natural Areas and Preserves (DNAP) has conducted a continuous information and education program in the Big Darby Creek Watershed as well as working with individual landowners and users to encourage conservation practices in the watershed. They have also been successful in

Little Darby Creek Conservation Through Local Initiatives

acquiring a small number of easements to protect riparian habitat. Combined, the Division and The Nature Conservancy (TNC) have easement and fee title interest in 350-600 acres in the watershed. The Division also administers the Wild and Scenic River Program in the state.

Approximately 69 and 20 miles of the Big and Little Darby Creeks are designated as State and National Scenic Rivers. State designation is codified under the Ohio Revised Code Sect. 1514.14 et. al. Several key provisions of the law are abbreviated as follows.

- The Director of the Department of Natural Resources shall designate a river corridor (once proposed and approved) not more than 1,000 feet on each side of the channel from normal waterline to preserve water conservation, scenic, fish, wildlife, historic, or outdoor recreation values. (This pertains only to protection from publicly funded projects).
- The Director may acquire real property or any estate, right, or interest therein for protection and public recreational use as a wild, scenic, or recreational river area.
- The Chief of the Division of Natural Areas and Preserves may expend funds for the acquisition, protection, construction, maintenance, etc., of real property and public use facilities in designated river corridors when funds are so appropriated by the general assembly. The Chief may condition such expenditures, acquisition or land or easements, or construction of facilities with a designated area upon the adoption and enforcement of adequate floodplain zoning rules.



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These provisions are exemplary and do serve as guidance to local zoning authorities that strong ordinances for stream corridor protection are recommended. County zoning ordinances have the capacity to dovetail or overlay with state scenic river legislation if so desired. Furthermore, these elements can potentially mesh with other programs with available funding, primarily Federal. Presently, there are no state grant programs specifically designated for wild and scenic rivers.

Other State Programs

The Ohio Department of Natural Resources Division of Forestry offers landowners assistance in managing and planting their forests. At least one landowner in the Little Darby Creek Watershed has worked with ODNR to plant trees in and near the flood plain of Little Darby Creek. There may be others that we are not aware of.

Through ODNR, the Ohio Nature Works and Wetland Reserve Piggy-Back Program have provided some impetus to protect land in the watershed over the past 5 years. State-wide they have had a much greater effect than in the Darby Creek Watershed. Additional information about other programs currently available is provided in the later sections of this report, titled "Resources Available to Assist Local Conservation Efforts."

4. U.S. Department of Agriculture

Farmland Preservation

With the passage of the Clean Ohio Fund in 2001, Ohio set aside \$25 million for farmland preservation across the state over the next 4 years. In addition, the recently passed Farm Security and Rural Investment Act of 2002 (Farm Bill) authorized a total of over \$400 million for farmland preservation over the next five fiscal years. Prior to the recent implementation of Ohio's program and the Farm Bill Authorization, only a voluntary preservation program was available in Ohio.

The Ohio Department of Agriculture (ODA), Office of Farmland Preservation now manages the perpetual easement program authorized by the Clean Ohio Fund. It provides cost sharing up to 75 percent for farmland preservation. Of the more than 400 applications received for the initial \$6.25 million allocation, very few were submitted from producers in the Darby Creek watershed. None scored high enough to be funded during the first application year. It is anticipated that this program will protect between 3,000 and 4,000 acres per year throughout Ohio.



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Wetland Reserve Program (WRP)

The WRP, administered by the Natural Resources Conservation Service (NRCS), United States Department of Agriculture (USDA) was authorized in 1990. When the initial proposal for the national wildlife refuge was made in 1997, less than 100 acres were enrolled within the designated project area; throughout the entire 560 square mile watershed only 264 acres had been enrolled. As of July 9, 2002, approximately 824 acres had been enrolled throughout the entire watershed (358,400 acres). This figure includes riparian acreage (NRCS, 2002). Presently, only four of six watershed counties have lands enrolled in the WRP.

Conservation Reserve Program (CRP)

The CRP administered by the Farm Service Agency (FSA), USDA has been available to producers throughout the country since 1985. It has been targeted toward highly erodible land (HEL) and in environmentally sensitive watersheds. CRP and its companion Continuous CRP (available since 1996) have been used to take land out of production for up to 15 years under long term average rental cost contracts with producers, without penalty to their "base cropland acreage" (BCA). BCA is a concept used by the Farm Service Agency (FSA) to 1) measure "working land" or land in production and 2) compute a range of producer federal subsidy payments. Wetland restorations are now a component of the CRP and restorations are generally cost shared at a rate of 90 percent.

The draft Environmental Impact Statement for the Refuge proposal originally reported less than 500 acres of land enrolled in the CRP for the 50,000-acre

Table 3: Present Acreage Enrollment in CRP

County	Acreage
Franklin	571
Logan	172
Madison	1,060
Union	1,500-2,286
Pickaway	864
Champaign	1570
Total	5,737-6,523

refuge study area. This has not changed drastically. The following table summarizes present acreage enrollment throughout the Big Darby Creek Watershed by county.

The range listed for Union County is a reflection of differing estimates provided by FSA and NRCS.

Also, it is important to remember that CRP acreage fluctuates as contracts expire and new enrollments come into the program. The watershed is over 358,000 acres in size. Most of it is still in agriculture.

Conservation Reserve Enhancement Program (CREP)

The Conservation Reserve Enhancement Program is administered by the USDA and, as the name implies, is an significant enhancement or incentive above the CRP, which focused on broader and significant agricultural resource problems. There is currently no CREP program in the Big Darby Creek Watershed, however, application is being made to institute the program in the larger Scioto

River Watershed, which would include Big and Little Darby Creeks. This program enhances the existing Conservation Reserve Program through the offer of greater landowner incentive payments for the use of conservation practices which are packaged as a suite. Each may have differing, and longer, contract periods and higher combined payments from differing sources. The program requires a match, usually 25 percent, from the state and encompasses a defined watershed or subwatershed areas. Presently, each state is allocated up to 100,000

acres for potential inclusion into this program. Each state must make a detailed application which stresses its need to USDA to receive consideration for an appropriation. A formal contract between the state and USDA is negotiated and signed that commits each to fund the practices. Ohio presently has two CREP projects: Western Lake Erie Watersheds and the Upper Big Walnut Creek Watershed. The CREP program is discussed in more detail in the section titled “Resources Available to Assist Local Conservation Efforts” later in this report.



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5. Partners For Fish and Wildlife

The Partners for Fish and Wildlife (PFW) program was instituted by the U.S. Fish and Wildlife Service (Service) in 1988 to augment its land protection and management activities associated with the National Wildlife Refuge System. Approximately 2,200 acres of wetland and grassland have been restored in Ohio under this program. The Ohio Division of Wildlife's companion program has similarly restored another 2,800 acres. The majority of these restorations have been in north central, northwestern, and northeastern Ohio. Essentially no new restorations have been started or completed in the Big Darby Creek Watershed since the inception of the refuge proposal. Prior to the proposal, the Service had completed three small PFW projects in the entire watershed. These projects were for livestock exclusion, tree planting and in-channel stream improvement. The ODW had completed none prior to the proposal and has completed one restoration since 1999.

6. Other Programs

At least one landowner in the Little Darby Creek Watershed also received aid in a tree planting effort sponsored by the Dayton Power and Light Company under their recarbonization program for strip mining activity. The company no longer offers the program.

Chapter 7: The Communities' View of Important Elements of Local Conservation Action

The Service distributed a survey to 3,337 individuals in early July, 2002 to get a sense of what the people who had expressed interest in the Little Darby Creek watershed thought of preserving the resources of the watershed. By August 2, 2002, a total of 156 surveys had been returned including 41 from Madison and Union County residents and 115 from individuals outside those two counties. The results are presented in Appendix 1.

An explanation of the survey form and the rationale for the questions is discussed in Appendix 1 as well. The questions are based upon principles of a process for involving diverse interests in management and planning issues. The summaries of responses provided below are presented to give the reader a general feel for the range of opinions expressed. You are encouraged to read the actual comments in the Appendix get a better sense of all views presented.

The Views of Madison and Union County Residents

Are there issues to address(Questions 1-4)?



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Of the 41 surveys returned by Madison and Union County residents, 39 (95%) responded that they value the preservation of agriculture in the Little Darby Creek Watershed, 39 (95%) said they valued the preservation of the rural character of the watershed, and 39 (95%) said that they valued the preservation of the natural resources of the watershed.

There was diversity of responses to Question 4 which asked respondents to identify any threats to agriculture, the rural character, or natural resources. One respondent said that there were no threats. Others cited the government or the U.S. Fish and Wildlife Service as the principle threat, especially related to a fear of a loss of property rights. Concern regarding urban sprawl and associated development was the most common issue cited.

Who is responsible to address those issues (Question 5)?

Asked who's responsibility is it to address the threats in the watershed, many respondents cited landowners, while others

mentioned elected officials, township, county, state, and federal government. Local citizens and landowners and local government were mentioned most frequently.

How would you define a fair and sensible approach to addressing the issues (Question 6)?

When asked to identify elements of a fair and sensible approach to address threats in the Little Darby Creek Watershed, many ideas were generated that detail actions that could be taken. Some suggested that local landowners must be listened to and others felt that landowners have a stewardship responsibility to the land, that they have been good stewards, and that they will continue to do so. Some mentioned land stewardship as a responsibility to future generations.

Utilizing existing Department of Agriculture conservation programs like the Conservation Reserve Program (CRP) and the Conservation Reserve Enhancement Program (CREP) was identified by some while others suggested zoning, education, limiting development, and purchase of development rights.

Concern was expressed about big government and the need to maintain local control. Open meetings, opportunities for volunteers to be involved in the planning, talking over any suggestions with local people, flexibility in listening to different approaches, and incorporating local input into any solution were also mentioned as elements of a fair and sensible approach. A few respondents identified steps to a successful resolution of issues, such as identifying the threats, evaluating possible ways to deal with the issue, seeking local input, arriving at a mutually acceptable solution, and implementing and monitoring for compliance.

Controlled growth was the solution for one respondent. Others described zoning or other means to control urban expansion and certain development.

How would you know if those responsible for resolving the issues had listened to you and valued your input (Question 7)?

The question was intended to assess how people would evaluate the success of their input in any future community-led process that was initiated to address issues in the area. However, some respondents interpreted the question to mean how would they know if their input was listened to for this report. They responded that there would be proof that they had been listened to when the government, and the federal government in particular, and the U.S. Fish and Wildlife Service specifically, was totally out of the picture.

Some respondents expressed confidence in their local governmental and agency officials with such statements as, "In Union County, I have faith in our Cooperative Extension Agent, Soil Conservation Service employees, our County Engineer and some others. If they have input into the plan and are satisfied, I will be also." Another said, "The county commissioners are very approachable, and willing to listen. In my opinion they are the logical leaders in these efforts."

Communication was important to some. They cited evidence that they were heard and that their input was valued as public meetings, written communications, open meetings, coverage in the press, and "Talk to me and let me see it (my proposals) in the plan."

One individual said, “I know government listens as ‘it is us.’”

“The land should remain natural for our grandchildren,” and “The plan should ensure the preservation of natural resources for future generations,” were sentiments expressed as possible proof that they had been listened to.

The results would be proof to some that they had been heard. Actions such as laws that would change, landowners being left alone when their stewardship is acceptable, the existence of a plan to protect the watershed from pollution and destructive development, and farmland being protected from development would be evidence to others that they had been heard.

Finally, one individual summed up their thoughts with the statement, “I do not see threats but opportunities. I believe individuals working on the Darby watershed plan care about the watershed. I believe the Little Darby Watershed is a result of generations of landowners and farmers watchful eyes and that trend will continue.”

What specific issues must be addressed in any local conservation action initiative or that would enhance such an initiative (Question 8)?

A table was included in the survey that allowed respondents to check off any topics that they felt were important to address. The total responses check for each item are listed in Table 4 below.

In addition to the areas of interest listed in the table, respondents were asked to identify any other points that should be addressed.

Additional issues identified included such topics as public access to streams and surrounding land, zoning, cohesive efforts - not one group against the others, the balance between property rights and the common good, clean drinking water and clean air, and preservation of landowner rights.

Are you a resident of Madison or Union Counties (Question 9)?

The respondents were distributed as follows:

16 from Madison County

13 from Union County

12 from Madison or Union County (responded ‘Yes’ to the question)

Table 4: Topics Important to Madison County and Union County Residents

<u>30</u> Landowner rights	<u>22</u> Landowner incentives	<u>28</u> Preservation of the rural character or the area
<u>29</u> Preservation of farmland	<u>30</u> Preservation of the stream corridor	<u>29</u> Role of the individual landowner
<u>27</u> Role of County govt.	<u>19</u> Role of State govt.	<u>12</u> Role of Federal govt.
<u>15</u> Environmental education opportunities	<u>13</u> Partnership opportunities	<u>15</u> Development and its compatibility with preservation of agriculture and natural resources
<u>15</u> Hunting & fishing Opportunities		

The Views of Interested Parties Living Outside of Madison and Union Counties

Are there issues to address(Questions 1-4)?

Of the surveys returned by residents living outside of Madison and Union Counties, 100 (88.5%) responded that they value the preservation of agriculture in the Little Darby Creek Watershed while 8 (7%) said they did not, 107 (94.7%) said they valued the preservation of the rural character of the watershed while 1 (.9%) said they did not, and 103 (91.2%) said that they valued the preservation of the natural resources of the watershed, while 4 (3.5%) said they did not. Additional comments to the first three questions were provided by many respondents and are presented in Appendix 1.

There was diversity of responses to Question 4 which asked respondents to identify any threats to agriculture, the rural character, or natural resources. Although comments varied from anti-Federal government to anti-agriculture due to pollution and water quality the overwhelming concern/threat was urban sprawl and development resulting in many comments regarding zoning laws and the enforcement of the laws.

Who is responsible to address those issues (Question 5)?

The majority of comments expressed that local elected officials, local landowners, county and state government should be responsible. A smaller number of comments stated that the federal government should be the sole responsible agency or partners with the county and state agencies. Some expressed concern for private property rights and distrust of the federal government. Other respondents felt that a collaborative approach involving federal and state agency personnel, landowners, and local government was the way to go.

How would you define a fair and sensible approach to addressing the issues (Question 6)?

It appears there was not an overwhelming majority for this question. A variety of ways to deal with the issues are presented. Many comments suggested economic incentives, easements, tax subsidies, grants. Zoning was also an acceptable approach in many of the comments. Many suggested working and cooperating with The Nature Conservancy, Ohio DNR, Ohio EPA, and the Sierra Club and of course private landowners. Some stated that specific guidelines should be developed with conservation goals, etc.

How would you know if those responsible for resolving the issues had listened to you and valued your input (Question 7)?

For many, evidence that their concerns and input was valued and had been listened to would come in the form of actions that preserve the agricultural and natural resources. Examples given of such action include zoning, water quality assessments improving, existence of a broad based group with a clear statement of commitment to protect the watershed, and financial incentives to maintain the character of the watershed. Respondents often cited various communication

Table 5: Topics Important to Individuals Living Outside of Madison and Union Counties

65 Landowner rights	69 Landowner incentives	88 Preservation of the rural character or the area
79 Preservation of farmland	92 Preservation of the stream corridor	79 Role of the individual landowner
77 Role of County govt.	71 Role of State govt.	63 Role of Federal govt.
78 Environmental education opportunities	47 Partnership opportunities	58 Development and its compatibility with preservation of agriculture and natural resources
52 Hunting & fishing Opportunities		

efforts as evidence of their concerns being heard and valued. Such comments included suggestions of public forums, listening meetings, personal contacts, visits, and explanations from key decision makers directly to affected landowners before any general public information is disseminated.

What specific issues must be addressed in any local conservation action initiative or that would enhance such an initiative (Question 8)?

A table was included in the survey that allowed respondents to check off any topics that they felt were important to address. The total responses check for each item are listed in Table 5.

In addition to the areas of interest listed in the table, respondents were asked to identify any other points that should be addressed.

Additional issues identified included such topics as local zoning, financial incentives for preservation actions, and making people aware of any plan and offering opportunities for them to be involved in the manner of their choosing. Some specific actions were also recommended by many, including such things as the government buying farmland and leasing it back to farmers, enlisting seniors as volunteers, and not using farmland for refuges or housing.

Are you a resident of Madison or Union Counties (Question 9)?

The specific location of respondents outside of Madison and Union Counties was generally not identified. However, the mailing list of those who have expressed interest in the refuge proposal in the past spans states across the U.S. However, the largest number of interested parties were in the Columbus metropolitan area or counties surrounding Madison and Union Counties.

Survey Discussion Conclusion:

While opinions presented are diverse, there is strong agreement among all parties, both those who reside in Madison and Union Counties and those who reside outside of those counties, that preservation of agriculture, the rural character, and the natural resources of the Little Darby Creek Watershed are important. That the preservation of these characteristics of the area be locally driven is also important to many. Respondents to the survey have suggested many ideas that could contribute to an effective process to preserve these resources. The broad interest and common concerns should encourage those willing to pursue locally driven conservation strategies for the preservation of agriculture, rural character, and natural resources in the Little Darby Creek Watershed.

Chapter 8: Resources Available to Assist Local Conservation Efforts

A. County Assistance and Programs

County-wide zoning is established and accepted in Madison County with the exception of two townships. The zoning regulations were revised and adopted by the Madison County Commissioners on May 1, 2002. The county's farmland preservation plan is ancillary to the zoning provisions. Of particular importance is the provision of the zoning regulations which affects agricultural lands since most of the land within the Darby Creek watershed encompassed by Madison County is still agricultural.

A few highlights of the revised zoning include:

Lot Area: No parcel of land shall be used for residential purposes which has an area of less than twenty (20) acres.

Lot Frontage: Lots shall have a minimum of sixty (60) feet of contiguous road frontage on a road approved by the county engineer.

Some of the conditional uses allowed within the Agricultural District include private schools and colleges, kindergarten and child care facilities, churches, borrow pits, two dwelling houses per 20 acres, and most public uses such as parks, schools, administrative, cultural and service facilities.

Overall, this may be the most restrictive ordinance among all political subdivisions within the Big Darby Creek Watershed. County-wide zoning still requires acceptance by townships in order for it to be truly county-wide. As of August 2002, in Madison county two townships had not adopted this ordinance.



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Madison County and Union County both have Comprehensive Land Use Plans. The Comprehensive Land Use Plans serve as guides for development.

Contact:

Madison County Commissioners: 1 N. Main Street, P.O. Box 618, London, Ohio 43140-0618, (740) 852-2972, Fax: (740) 845-1660

Union County Commissioners: 233 West 6th Street, Marysville, OH 43040, 937-645-3012, Fax: 937-645-3002

B. State Assistance and Programs

1. Clean Ohio Fund

Approval of House Bill No. 3 created the Clean Ohio Program. The Clean Ohio Program implements the constitutional authority of Issue 1 which was approved by statewide referendum in November, 2000. Project applications are submitted through an organization established under the Ohio Public Works Commission. Projects must have a minimum 25 percent cash or in-kind match.

The Clean Ohio Program provides four hundred million dollars over four years (2001-2004) for “Brownfield” environmental clean up projects and “Greenfield” open space and conservation preservation projects.

The Clean Ohio Program has four sub-programs, two of which require significant involvement of the district public works integrating committees and the Commission.

- | | |
|---|--|
| 1) Brownfields: | This part of the program is be administered by the Ohio Department of Development, in close coordination with the Ohio Environmental Protection Agency. Applications and guidelines for project prioritization by district integration committees will be developed by the Ohio Department of Development. Funding; \$50,000,000 per year. |
| 2) Open space and watershed conservation (Clean Ohio Conservation Program): | Each district integrating committee appoints an eleven member Natural Resources Assistance Council which receives and prioritizes applications in a process similar to the Commissions existing programs. Funding; \$37,500,000 per year. |
| 3) Farmland preservation: | Grants to local entities for the purchase of agricultural easements. Administered by the Department of Agriculture, with the advice of a Farmland Preservation Advisory Board. Funding; \$6,250,000 per year up to \$25 million over 4 years. Contact: Ohio Department of Agriculture, Office of Farmland Preservation: 614-728-6238; www.state.oh.us/agr/ |
| 4) Recreational trails: | Grants to local entities for the acquisition and development of recreational trails. Administered by the Ohio Department of Natural Resources (see ODNR, Division of Real Estate and Land Management below), with the advice of a Clean Ohio Trail Advisory Board. Funding \$6,250,000 per year. |

Clean Ohio Fund Contact Information: ph: 614-466-0880 www.pwc.state.oh.us/clean_ohio.htm

2. Ohio Department of Agriculture

a. Office of Farmland Preservation

The Office of Farmland Preservation helps educate the public about preserving farmland - one of our most precious resources - and helps local officials with farmland protection efforts.

The state received its first tool to help protect Ohio's farmland from development. S.B. 223 was signed in January 2000 allowing the State of Ohio and local governments to acquire agricultural easements for the purpose of protecting productive farmland from conversion to non-agricultural use. The easements are voluntary legal agreements restricting development on farmland, with the land remaining on the tax rolls and under private ownership and management.

Grants are made to local entities for the purchase of agricultural easements. The program is administered by the Department of Agriculture, with the advice of a Farmland Preservation Advisory Board. Funding is available under the Clean Ohio Fund in the amount \$6,250,000 per year up to \$25 million over 4 years.

The first request for participants in the program generated 442 applications representing 63,450 acres across 49 of Ohio's 88 counties. It is expected that the average agricultural easement will cost the state approximately \$2,000 per acre, the estimated difference between the average development value and farmland value. That means the first-round applications received amounted to about \$127 million in requests. However, only \$6.25 million was available for the first round of funding.

Contact: Ohio Department of Agriculture, Office of Farmland Preservation: 614-728-6238; www.state.oh.us/agr/

3. Ohio Department of Natural Resources

The various divisions within the Ohio Department of Natural Resources offer a number of grants and technical assistance that would benefit conservation efforts in the Little Darby Creek Watershed. A good listing of grants available can be found at their Internet web site at: www.ohiodnr.com/grants.htm. Programs that could be especially useful in the Little Darby Watershed are highlighted below by ODNR division.

a. Ohio Department of Natural Resources Division of Forestry

1) Forestry Landowner Assistance Program

At least limited use is known to have been made in the Little Darby Creek Watershed of the ODNR's Forestry Landowner Assistance program. The mission of the Service Forestry Program is to develop better stewardship of the forest resources on private lands in Ohio. This is accomplished through on-site technical assistance and the dissemination of information to landowners.

There are twenty-five Service Foresters statewide that work one-on-one with the woodland owners. The Service Foresters are available to provide landowners with current information for the long term management of their woodlands. They can provide management plans and advice on how to accomplish the plan's objectives. They also provide landowners with technical assistance and information on tree planting projects, woodland improvement activities and timber marketing assistance.

The Service Foresters also direct landowners to education participation programs such as the Tree Farm Program, Woodland Steward Program, Woodland Owners Groups, and the Coverts Program

2) Regional Forestry Associations

Regional Forestry Associations offer opportunities: to attend meetings with interesting programs and knowledgeable speakers, to receive a monthly newsletter featuring current forest/tree/wildlife issues and topics, to attend field days and hands-on training sessions, and much, much more.

The contact for the Central Ohio Woodland Interest Group is:
Tom Berger
Division of Forestry
Fountain Square, Building H-1
Columbus, Ohio 43224
614-265-6706

3) Tree Seedlings Sales

Ohio's nursery program provides quality seedlings for reforestation and conservation projects. About 5,000,000 seedlings are grown each year at the state's two nurseries, located in Marietta and Zanesville. Phone inquiries about the Tree Seedling Sales Program should be directed to the Zanesville State Nursery at (740) 453-9472 or Marietta State Nursery at (740) 373-6574, or phone either nursery using the toll free number (877) 691-8733.

The Ohio DNR Division of Forestry Internet web site (www.dnr.state.oh.us/forestry/) has additional information about forestry assistance available.

4) GreenWorks

GreenWorks! is the community action, service-learning component of Project Learning Tree® (PLT). PLT is an award winning, broad-based environmental education program for educators and students in PreK - grade 12. PLT helps students learn how to think, not what to think, about the environment. PLT, a program of the American Forest Foundation, is one of the most widely used environmental education programs in the United States and abroad. Annual community action projects are funded through the national PLT organization (www.plt.org or 1-888-889-4466). Projects must be environmental, include PLT educator and youth, and be linked in partnership with local group participation (e.g., PTA, Lions, Rotary, Jaycees, etc.). In the past projects have included such activities as tree planting, habitat restoration, and building an environmental education site. Submit requests by summer through state PLT office to receive letter of support. Annual deadline is early fall for final grant proposal. Contact: Sue Wintering, 614-265-6657, or plt@dnr.state.oh.us

b. Ohio Department of Natural Resources Division of Real Estate and Land Management

1) Clean Ohio Trails Fund

Political subdivisions and non-profit organizations may apply for these funds. The grants can provide up to 75% of the project costs for eligible trail acquisition and development costs. The local match can be in-kind contributions or other interests in land, labor, or materials. Projects will be selected by criteria identified in, but not limited to, a statewide trails plan and Amended Substitute House Bill 3. The program is administered by the Ohio Department of Natural Resources, with the advice of a Clean Ohio Trail Advisory Board. Funding \$6,250,000 per year. Contact: Bill Daehler, State Trails Coordinator, ODNR, Division of Real Estate and Land Management, 1952 Belcher Drive, C-4, Columbus, Ohio 43224 ; 614-265-6402

2) Land Water Conservation Fund (LWCF)

These funds can be utilized by all local subdivisions of government except school boards. These grants provide up to 50 percent reimbursement for outdoor recreation projects. Federal money is administered by the state in cooperation with the National Park Service. Funding level varies each year. Call for an update on the status of the program and availability of funds at 614-265-6646 or the Grants Staff at (614) 265-6395.

3.) Natureworks: Parks & Recreation

Political subdivisions of state except school districts and agricultural societies Local governments can apply for up to 75 percent reimbursement grants (state funding) for acquisition, development, or rehabilitation of public park and recreation areas. They can apply for up to 75 percent reimbursement grants (state funding) for acquisition, development, or rehabilitation of public park and recreation areas. The agency must have proper control (title or at least a 15-year non-revocable lease) to be eligible for a development or rehabilitation grant. Eligible government agencies within each county compete for grants. All projects must be completed within one-and-a-half to two years. Contact: 614-265-6646

4) Recreational trails Program

Cities and villages, counties, townships, special districts, state and federal agencies, and nonprofit organizations are eligible. Up to 80 percent matching federal funds is reimbursed. Eligible projects include development of urban trail linkages, trail head and trailside facilities; maintenance of existing trails; restoration of trail areas damaged by usage; improving access for people with disabilities; acquisition of easements and property; development and construction of new trails; purchase and lease of recreational trail construction and maintenance equipment; environment and safety education programs related to trails. Contact: Bill Daehler, 614-265-6402

c. Ohio Department Of Natural Resources Division Wildlife

Among other services, the ODNR Wildlife Division offers technical information to landowners on topics ranging from crop field management for wildlife to urban

Little Darby Creek Conservation Through Local Initiatives

landscape management for wildlife. Details can be found on their Internet web site at <http://www.ohiodnr.com/wildlife/resources/mgtplans/mgtplans.html>. The Division's mission statement states that they are dedicated to conserving and improving the fish and wildlife resources and their habitats, and promoting their use and appreciation by the public so that these resources continue to enhance the quality of life for all Ohioans. The Division manages or cooperates in managing over three-quarters of a million acres of diverse wildlife lands throughout the state, plus more than 2 1/4 million acres of water. One of the tools they use is land acquisition.

Grassland Restoration: Pastures-to-prairies

Available to Individuals and organizations. Funding is provided for costs associated with prairie restoration projects on private land in Ohio. Projects include funding to assist with the purchase of native warm-season grass seed and forbs, herbicide to control weeds, and rental equipment to plant the seed. Eligible landowners can receive 75 percent cost-share for grassland restoration if they agree to a 10-year maintenance agreement. A minimum of 10 acres is required, and sites are scored based on size and location. Contact: Luke Miller, 614-265-6907

Wetland Restoration

Available to Individuals and organizations. Funding is provided for costs associated with wetland restoration projects on private land in Ohio. Projects include tile cuts and/or construction of small, low level dikes to restore or enhance hydrology. Eligible landowners can receive 50 percent cost share for restoration or a maximum of \$500 for each acre of wetland restored if they agree to a 10-year maintenance agreement. Twenty-year agreements can pay up to 100 percent of the cost, not to exceed \$1,000 for each wetland acre restored. Contact: Luke Miller, 614-265-6907

USFWS Photograph by Tom Larson



Through the Partners for Fish and Wildlife Program, the U.S. Fish and Wildlife Service works in cooperation with the Ohio Division of Wildlife to restore wetlands and grasslands. Additional cost sharing may be available to landowners from the Service for wetland and grassland restoration.

The Division of Wildlife administrative headquarters is at 1840 Belcher Drive, Columbus, Ohio 43224-1329. Telephone numbers are (614) 265-6300 and 1-800-WILDLIFE. Information about laws, fish, and wildlife may also be obtained for the Darby Creek area at the wildlife district field office at Wildlife District One, 1500 Dublin Road, Columbus, Ohio 43215, Phone: (614) 644-3925.

d. Ohio Department Of Natural Resources Division of Natural Areas and Preserves.

The Division of Natural Areas and Preservers administers The Big Darby Creek State and National Scenic River that includes the downstream half of the Little Darby Creek. The scenic river designation puts some restrictions upon lands

that fall within the designated boundaries. The Internet web site <http://www.ohiodnr.com/dnap/preserves/RulesandRegs.htm> discusses the rules and regulations that apply to scenic rivers. The Division also conducts a volunteer based stream quality monitoring program that encompasses monitoring stations on the Big and Little Darby Creeks. The purpose of Stream Quality Monitoring is twofold. One it provides an excellent outdoor, hands-on experience for the participant to learn about the natural values and environmental benefits of our rivers and streams. It is an excellent environmental education tool. Secondly, the data collected by participants is recorded in the Scenic River Program's computer database and provided to the Ohio Environmental Protection Agency for inclusion in the 305(b) water quality report, required by U.S. E.P.A. Ohio was the first state in the nation that used water quality data from an organized voluntary program as part of the official state water quality summary. Additional information is available at the Internet web site www.ohiodnr.com/dnap/monitor/sqm.html or by contacting the ODNR Division of Natural Areas and Preserves, 1889 Fountain Sq., Bldg. F-1, Columbus, OH 43224, 614/265-6453, 614/267-3096 (FAX)

e. Ohio Department of Natural Resources Division of Water

The Division of Water can provide communities with information related to participation in the National Floodplain Insurance Program (NFIP). The Floodplain programs mission statement is "The Mission of the Floodplain Management Program is to provide leadership to local governments, state agencies, and interested parties toward cooperative management of Ohio's floodplains to ensure the reduction of flood damage and the recognition of the floodplain's natural benefit. This mission is accomplished through technical assistance, public awareness, education, and development / protection standards." Call (614) 265-6750 for more information or visit their Internet web site at www.dnr.state.oh.us/water/floodpln/default.htm.

An NFIP participation requirement for all local communities is the adoption & enforcement of floodplain development regulations that meet or exceed the federal NFIP standards as contained in the Code of Federal Regulations (CFR). Copies of the National Flood Insurance Program & Related Regulations may be obtained from the Federal Emergency Management Agency (FEMA) by calling (800) 480-2520.

f. Ohio Department of Natural Resources Division of Soil and Water

Agricultural Pollution Abatement Cost Sharing to Landowners

Provide cost-share and technical assistance to solve agricultural or forestry-related sediment or livestock waste pollution problems. Provides 75% (up to \$15,000) of the cost of installing eligible practices (defined in Ohio Administrative Code 1501:15-5-13) that will provide the least cost alternative to control pollution. Contact: Your local Soil & Water Conservation District Office (see the listing for Madison and Union Counties in the Soil & Water Conservation District section below)

The U.S. Fish and Wildlife Service, the Ohio Division of Wildlife, and Ohio Division of Natural Areas and Preserves presently have additional funding/cost sharing available in cooperation the the Division of Soil and Water for Livestock exclusion practices. Specific fencing and watering practices are eligible for 100 percent cost sharing.

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Pollution Abatement Toolbox

Three types of grants addressing manure management challenges are available: Data collection and analysis grants provide opportunities for SWCDs and their partners to evaluate new and existing manure management technology. Maximum amount \$2,500. College intern grants assist with manure nutrient management workloads by funding seasonal help, with a maximum amount of \$3,000. Training and workgroup grants fund training opportunities for field staff and private consultants, with up to \$1,000 for projects and/or training expenses. Contact: 614-265-6684

Nonpoint Source Pollution (NPS) Education Grants

These are provided through SWCDs and through them, schools and other local organizations.

Specifications: Two types of grants are available: Personnel grants through which SWCDs can hire or retain NPS education specialists to develop education programs targeting schools and general public audiences. Watershed Awareness to Watershed Action (WAWA) mini-grants for projects such as educator workshops, student field days, water festivals, storm drain stenciling, landowner and developer seminars, and other watershed awareness initiatives. Contact: 614-265-6682.

Wetland Reserve Piggy Back Program

Additional incentive payments are available from the Division of Soil and Water to landowners who enroll riparian areas in USDA's Wetland Reserve Program. Contact: 614-265-6682

Watershed Coordinators

This program is available to Non-profit organizations, local and regional units of governments.

Organizations can request a six-year declining grant to employ a watershed coordinator to work on watershed planning and implementation to control nonpoint source pollution.

Grant covers salary and fringe benefits for the coordinator, 100 percent (up to \$40,000) in year one and declining to 50 percent in year six. Contact: Rosida Porter, 614-265-6647

Urban Streams Program

This program is available to SWCDs, or partners in association with an SWCD. There are two categories of grants: small grants up to \$5,000 and large grants from \$5,001 to \$40,000 with a strategic plan of 3-5 years. Large grants may be for strategic activities and practices listed below, or for new technical assistance personnel. Funding can cover:

- New positions that enhance SWCD assistance aimed at improving or protecting the integrity of the urban stream system. Personnel funding (up to \$40,000) is available the first year for a full-time position. This amount declines each year, reaching \$24,000 the fifth and final year, after

which district positions should be supported by the usual state-match relationship.

- Initiation of corridor/floodplain protection programs. Cost sharing to install practices, preventing or controlling NPS pollution, such as stormwater quality retrofits or stream channel restoration.
- Short-term personnel needs for the above purposes. Demonstration of restoration techniques which improve stream function.
- Monitoring and inventorying stream resources as part of an improvement strategy or NPS project or program.
- Training for staff (urban stream specialists or other urban personnel).
- Training for county and municipal staff or consultants to incorporate NPS reduction and channel function into stormwater design and programs.
- Updating and revising stormwater management requirements and programs for broader stream system protection. Contact: 614-265-6685

4. Soil and Water Conservation Districts

The major goals of Madison Soil and Water Conservation District “is to design and implement conservation programs that help conserve our natural resources.” These goals are achieved by providing landowners with financial, technical, and educational assistance.

The mission of the Union Soil and Water Conservation District is “to promote, preserve and enhance the wise use of our natural resources for the people of Union County by providing technical, financial and educational assistance.”

Agricultural Pollution Abatement Cost Sharing to Landowners Program: See ODNR, Division of Soil and Water Conservation above.

Contact information:

Madison Soil and Water Conservation District, 831 U.S. Highway 42 North, London, Ohio 43140; Phone: (740) 852-4004; Fax: (740) 852-6295; www.mswcd.org/index.htm.

Union Soil and Water Conservation District, 943 East Fifth Street, Marysville, Ohio 43040; (937) 642-5871; (937) 642-2825 Fax; www.co.union.oh.us/soil-water-conservation.

5. Ohio Environmental Protection Agency

a. Clean Water Act of 1972, Section 319 Grants

Congress amended the Clean Water Act (CWA) in 1987 to establish the section 319 Nonpoint Source (NPS) Management Program because it recognized the need for greater federal leadership to help focus State and local nonpoint source efforts. Under section 319, State, Territories, and Indian Tribes receive grant

money which support a wide variety of activities including technical assistance, financial assistance, education, training, technology transfer, demonstration projects, and monitoring to assess the success of specific nonpoint source implementation projects.

319 Planning Projects

Applicants for a 319 planning grant must be able to access documentation that NPS pollution is causing water quality impairment in the watershed. Successful watershed management projects usually have local community support, specifically direct involvement, local leadership, and assistance with development and implementation of a watershed management plan. Basic components of a 319 planning grant project which could be approved are:

- Building public support;
- Creating an inventory of the watershed;
- Defining the problem;
- Setting goals and developing solutions;
- Creating an action plan; and
- Implementation and post-evaluation.

Ohio's Guide to Developing Local Watershed Action Plans in Ohio is a critical tool local communities may utilize to develop their own 319 watershed management planning project. More information is found on the Nonpoint Source Program page.

319 Implementation Projects

Applicants for a 319 implementation grant must address known causes and sources of water quality impairment due to NPS pollution as documented in the OEPA 305(b) Report, and described in the 303(d) TMDL list, OEPA biological reports and waterbody sheets on DSW's pages:

319 Groundwater Projects

Public drinking water protection areas with a groundwater source may be considered for 319 grant funding for community public water systems that lie within either priority TMDL areas or lie within various stream segments for which high quality assessment data exists.

Presently, the funding cap for 319 planning grant projects is \$100,000 and project duration may be up to 24 months. The funding cap for 319 implementation grant projects is \$1,000,000 and project duration may be up to 36 months. In either case, the nonfederal match must make up at least 40% of the total project cost.

Contact: 614-644-2879

b. Water Pollution Control Loan Fund

The Water Pollution Control Loan Fund (WPCLF) provides financial and technical assistance for a wide variety of actions to protect or improve the quality of Ohio's rivers, streams, lakes, and other water resources. The Fund offers assistance opportunities for both public and private entities.

WPCLF Assistance is available for a variety of projects including such activities as qualifying wastewater treatment works projects (including planning, design, and construction) which will be owned by public entities, and activities which reduce or avoid nonpoint source water pollution, such as agriculture/silviculture improvements and best management practices, stream corridor restoration/ protection, and stream corridor habitat protection and restoration.

The WPCLF offers below-market interest rate loans: direct loans are made to most public and large private borrowers, while smaller borrowers usually receive indirect loans through the linked deposit program. Special discounted interest rates are available for qualifying projects.

The WPCLF assistance can fund all eligible portions of proposed projects, or can be combined with other funding sources. We have coordinated project financing packages with agencies such as the Ohio Water Development Authority, the Ohio Public Works Commission, the Community Development Block Grant Program, Rural Economic and Community Services, and others.

In addition to offering low-interest loans, the WPCLF also provides communities with technical assistance, drawing upon our experience in planning, design review, and project implementation. For public entities with a wastewater treatment project, OEPA can provide technical assistance for such critical areas as flow evaluation, design standards and appropriate technology, as well as help identify and avoid potential adverse environmental impacts. As the project progresses, OEPA may provide assistance with development of user charge systems, preparation of bid documents, record-keeping, and completion of the loan application. Guidance during construction also is available.

OEPA works with applicants from the beginning of the WPCLF process through project completion. Initially, they will meet with you to understand your needs and to explain how the WPCLF program can help, and what its requirements are. If you are interested in a WPCLF loan, the next step is usually a preplanning meeting to help you further evaluate your needs and available solutions. Information on applying for a WPCLF grant can be found at: www.epa.state.oh.us/default/comguide.html.

Contact: (614) 644-2832

c. Ohio Environmental Education Fund

Monies credited to the Environmental Education Fund consist of half of all penalties collected by Ohio EPA air and water pollution control programs, as well as gifts, grants, and contributions. The Director of Ohio EPA, under the advice and assistance of the Advisory Council, may award grants totaling in excess of \$1 million annually. These highly competitive grants are awarded in amounts of up to \$50,000 each.

The fund must be used to enhance the public's awareness and understanding about issues affecting environmental quality in Ohio. The type of environmental education projects which can receive funding are not limited, but the following activities are eligible:

- Developing curricula for elementary and secondary schools and universities;

- Providing training in environmental issues for elementary and secondary teachers;
- Providing educational seminars for the public regarding the scientific and technical aspects of environmental issues;
- Providing educational programs on pollution prevention and waste minimization for the regulated community;
- Providing educational programs on regulatory requirements and methods to achieve and maintain compliance for the regulated community (including small businesses); and
- Providing scholarships in environmental sciences or environmental engineering at State colleges and universities.

In addition to these six environmental education activities, there is flexibility to allow grants to be awarded for creative, innovative projects.

There are two grant cycles annually; deadlines are January 15 and July 15. Educational projects that target pre-school through university, regulated community, and general public audiences are eligible for funding under the general grant program.

Grant guidelines are available that detail application requirements and preferred characteristics of all grant proposals. Grants coordinators are also available to assist in preparing grant proposals prior to the deadline dates.

Although grants coordinators can answer questions and offer guidance on how to comply with the grant application requirements, potential grantees should contact them several weeks prior to the deadline date to assure adequate time for assistance. In addition, staff of the Office of Environmental Education are available to make presentations about the Ohio Environmental Education Fund and grant application procedures.

The Ohio Environmental Education Fund Advisory Council, chaired by the director of Ohio EPA, was created to advise and assist the director of Ohio EPA in implementing and administering the Ohio Environmental Education Fund. The Advisory Council meets at least twice a year and has authority to review and comment on all expenditures from the Ohio Environmental Education Fund proposed by the Ohio EPA director. For additional information,

Contact: 614/644-2873

C. Federal Assistance and Programs

1. United States Department of Agriculture

A. USDA - Natural Resources Conservation Service

Contact:

State Office: NRCS State Office, 200 N High St Rm 522, Columbus, OH 43215-2479, State Conservationist, phone: (614) 255-2472, fax: (614) 255-2548, 614-255-2472 <http://oh.nrcs.usda.gov/>

Madison County: Natural Resources Conservation Service, London Service Center, 829 Us Highway 42 NE, London, OH 43140-9500; District Conservationist, phone:(740) 852-4004, fax: (740) 852-6295

Union County: Natural Resources Conservation Service, Marysville Service Center, 941 E 5th St, Marysville, OH 43040-1703; District Conservationist, phone:(937) 642-5871, fax: (937) 642-2825

1. Wetland Reserve Program

The Wetlands Reserve Program (WRP) is a voluntary program that provides technical and financial assistance to eligible landowners to restore, enhance, and protect wetlands. Landowners have the option of enrolling eligible lands through permanent easements, 30-year easements, or restoration cost-share agreements. The program is offered on a continuous sign-up basis and is available Nationwide. This program offers landowners an opportunity to establish, at minimal cost, long-term conservation and wildlife habitat enhancement practices and protection.

The WRP offers a range of contractual obligations to landowners from perpetual easements to long term contracts/agreements. NRCS pays for wetland and riparian habitat restoration costs in proportion to the length of the obligation. For example, NRCS will pay for 100 percent of the restorations costs for perpetual easements and 75 percent or less for anything less than perpetual. Since the mid-1990's, NRCS has identified the Darby watershed as a Special WRP Project Area which gives all applications from the area priority for funding.

WRP has an acreage enrollment limitation rather than a funding limit. Congress determines how many acres can be enrolled in the program and funding is somewhat flexible.

The Natural Resources Conservation Service (NRCS) estimates program funding needs based on the national average cost per acre.

The WRP was mandated by Section 1237 of the Food Security Act of 1985 (P.L. 99-198), as amended by the Food, Agriculture, Conservation and Trade Act of 1990 (P.L. 101-624) and the Federal Agriculture Improvement and Reform Act of 1996 (P.L. 104-127), to assist owners in restoring and protecting wetlands. WRP is reauthorized in the Farm Security and Rural Investment Act of 2002 (Farm Bill). WRP is a Commodity Credit Corporation (CCC) program administered by NRCS.

WRP is available in all 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the Virgin Islands of the United States, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territories of the Pacific Islands.

The program offers three enrollment options: *Permanent Easement*. Easement payments for this option equal the lowest of three amounts: the agricultural value of the land, an established payment cap, or an amount offered by the landowner. In addition to paying for the easement, the U.S. Department of Agriculture (USDA) pays 100 percent of the costs of restoring the wetland. 30-

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Year Easement. Easement payments through this option are 75 percent of what would be paid for a permanent easement. USDA also pays 75 percent of restoration costs.

For both permanent and 30-year easements, USDA pays all costs associated with recording the easement in the local land records office, including recording fees, charges for abstracts, survey and appraisal fees, and title insurance. *Restoration Cost-share Agreement.* This is an agreement (generally for a minimum of 10 years) to re-establish degraded or lost wetland habitat. USDA pays 75 percent of the cost of the restoration activity. This enrollment option does not place an easement on the property.

2. Wildlife Habitat Incentive Program

The Wildlife Habitat Incentives Program (WHIP) is a voluntary program that encourages creation of high quality wildlife habitats that support wildlife populations of National, State, Tribal, and local significance. Through WHIP, the Natural Resources Conservation Service (NRCS) provides technical and financial assistance to landowners and others to develop upland, wetland, riparian, and aquatic habitat areas on their property.

Section 387 of the Federal Agricultural Improvement and Reform Act of 1996 authorized NRCS to work with landowners to develop wildlife habitat on their property.

WHIP is reauthorized in the Farm Security and Rural Investment Act of 2002 (Farm Bill). NRCS works with private landowners and operators; conservation districts; and Federal, State, and Tribal agencies. Funding for WHIP comes from the Commodity Credit Corporation.

WHIP is available in all 50 States, the Caribbean Area (Puerto Rico and the Virgin Islands), and the Pacific Basin Area (Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands). To participate in WHIP, NRCS State offices must submit a State WHIP plan.

Eligibility

Land. Eligible lands under the program are: Privately owned land; · Federal land when the primary benefit is on private or Tribal land; State and local government land on a limited basis; and Tribal land.

If land is determined eligible, NRCS places emphasis on enrolling: · Habitats for wildlife species experiencing declining or significantly reduced populations; Practices beneficial to fish and wildlife that may not otherwise be funded; and · Wildlife and fishery habitats identified by local and State partners and Indian Tribes in each State.

Entity. To be eligible, an entity must own or have control of the land to be enrolled in the program for the duration of the agreement period.

The WHIP application process consists of the following five steps: · A landowner submits an application to an NRCS local office, conservation district office, or office of a designated cooperating entity. · The conservation district convenes the local work group to identify local wildlife habitat priorities and then communi-

cates these priorities to the State Technical Committee. The NRCS State conservationist consults with the State Technical Committee to rank the applications received based on the State WHIP plan and the state established ranking criteria.

3. Conservation of Private Grazing Land

The Conservation of Private Grazing Land Program (CPGL) is a voluntary program that provides technical assistance from the Natural Resources Conservation Service (NRCS) to owners and managers of private grazing land. Private grazing land, the largest agricultural land use, constitutes nearly half of the non-Federal land of the United States. This vast area contributes significantly to the quantity and quality of water available for use and supports some of the most extensive wildlife habitats in the Nation. Healthy and productive grazing land is a substantial component of the agricultural economy and provides environmental benefits, such as erosion control, nutrient cycling, and water purification and recharge. These lands provide food, fiber, and open space, and contribute to the economic viability of local economies through tourism and recreational activities. CPGL is reauthorized in the Farm Security and Rural Investment Act of 2002 (Farm Bill).

CPGL is a voluntary program available in all 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the Virgin Islands of the United States, American Samoa, and the Commonwealth of the Northern Mariana Islands.

The program provides for timely technical assistance to owners and managers of private grazing land to address resource concerns while enhancing the economic and social stability of grazing land enterprises and the rural communities that depend upon them. Under CPGL, NRCS provides technical assistance to landowners and managers who request assistance to voluntarily conserve or enhance their resources to meet ecological, economic, and social demands.

NRCS is the technical agency of the U.S. Department of Agriculture that provides assistance to conservation districts and individuals in planning and carrying out conservation activities. NRCS provides technical assistance to owners and managers of private grazing land for the long-term productivity and ecological health of grazing land. The objective of technical assistance on grazing land is to assist landowners and managers in recognizing and understanding the basic ecological principals associated with managing their land. The objective can be met by implementing a plan that meets the needs of the resources (soil, water, air, plants, and animals) and management objectives of the owner or manager. NRCS may provide assistance, at the request of the landowner or manger to:

- Maintain and improve private grazing land and its management;
- Implement grazing land management technologies;
- Protect and improve the quality and quantity of water.

4. Farmland Protection Program

The Farmland Protection Program (FPP) is a voluntary program that helps farmers and ranchers keep their land in agriculture and prevents conversion of agricultural land to non-agricultural uses. The program provides matching funds to State, Tribal, and local governments and non-governmental organizations with

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existing farmland protection programs to purchase conservation easements. These entities purchase easements from landowners in exchange for a lump sum payment, not to exceed the appraised fair market value of the land's development rights. The easements are for a minimum of 30 years. To date, all easements accepted into the program have been for perpetuity.

FPP is authorized by the Food Security Act of 1985, as amended. FPP is reauthorized in the Farm Security and Rural Investment Act of 2002 (Farm Bill). The Secretary of Agriculture delegated the authority for FPP to the Chief of the Natural Resources Conservation Service (NRCS), who is a vice president of the Commodity Credit Corporation (CCC).

FPP is available in all 50 States, the Caribbean Area (Puerto Rico and the Virgin Islands), and the Pacific Basin Area (Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands). To participate in FPP, NRCS State offices must submit a State FPP plan.

USFWS Photograph by Tom Latson



How FPP Works

The CCC, through NRCS, requests proposals from Federally recognized Indian Tribes, organizations to cooperate in the acquisition of conservation easements or other interests on farms and ranches. Once an entity is selected, the NRCS State conservationist enters into a cooperative agreement with, and obligates money to, the entity. The entity works with the landowner, processes the easement acquisition, and holds, manages, and enforces the easement. The Federal

share of any easement acquisition is limited to a maximum of 50 percent of the appraised fair market value of the conservation easement. A contingent right interest in the property must be incorporated in each easement deed for the protection of the Federal investment.

Eligibility

Land. Entire farms or ranches may be enrolled in FPP. The farmland or ranch land must contain at least 50 percent of prime, unique, Statewide, or locally important soil or contain historic or archaeological sites. These lands must also be subject to a pending offer from an eligible entity for the purpose of limiting conversion of the land to non-agricultural uses. Eligible land includes cropland, rangeland, grassland, pasture land, and forest land that is part of an agricultural operation. Incidental land that would not otherwise be eligible may be considered eligible as part of a pending offer, if inclusion would significantly augment protection of the associated eligible farm or ranch land. Farms or ranches with historical or archaeological resources must meet the following criteria:

Be listed in the National Register of Historic Places (established under the National Historic Preservation Act (NHPA), 16 USC 470, et seq.); or

B. USDA - Farm Services Agency (FSA)

Contacts:

National Internet web site: www.fsa.usda.gov; Ohio State office: 614-255-2500

Madison County: FSA London Service Center, 829 US Highway 42 NE, London, OH 43140-9500, County Executive Director, phone: (740) 852-4003, fax: (740) 852-6295

Union County: FSA Marysville Service Center, 941 E 5th St, Marysville, OH 43040-1703, County Executive Director, phone: (937) 642-6741, fax: (937) 642-3556

1. Environmental Quality Incentive Program (EQIP)

Program (EQIP) is a voluntary conservation program that promotes agricultural production and environmental quality as compatible National goals. Through EQIP, farmers and ranchers may receive financial and technical help to install or implement structural and management conservation practices on eligible agricultural land. EQIP was reauthorized in the Farm Security and Rural Investment Act of 2002 (Farm Bill). The Natural Resources Conservation Service (NRCS) administers EQIP. Funding for EQIP comes from the Commodity Credit Corporation.

EQIP activities are carried out according to an EQIP plan of operations developed in conjunction with the producer. Contracts for confined livestock feeding operations require development and implementation of a comprehensive nutrient management plan (CNMP). This plan is approved by the local conservation district. Practices are subject to NRCS technical standards adapted for local conditions. Farmers and ranchers may elect to use an approved third-party provider for technical assistance. EQIP applications are accepted throughout the year. NRCS evaluates each application using a state and locally developed evaluation process. Higher priorities are given to applications that encourage the use of cost-effective conservation practices, address National conservation priorities, and optimize environmental benefits. State Technical Committees, Tribal representatives, and local working groups convened by the conservation district advise NRCS on implementation of the program to address identified resource needs and concerns.

EQIP may pay up to 75 percent of the costs of certain conservation practices important to improving and maintaining the health of natural resources in the area. Incentive payments may be made to encourage a producer to adopt land management practices, such as nutrient management, manure management, integrated pest management, irrigation water management, and wildlife habitat management, or to develop a CNMP and components of a CNMP. Limited resource farmers and beginning farmers may be eligible for up to 90 percent of the cost of conservation practices.

EQIP offers contracts with a minimum term of one year after implementation of the last scheduled practice and a maximum term of ten years. These contracts provide incentive payments and cost share payments for implementing conservation practices. Total cost-share and incentive payments are limited to \$450,000 per individual over the period of the 2002 Farm Bill, regardless of the number of

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farms or contracts. Starting in fiscal year 2003, no individual or entity may receive EQIP payments in any crop year in which the individual or entity's average adjusted gross income for the preceding three years exceeds \$2.5 million, unless 75 percent of that income is from farming, ranching, or forestry interests.

2. Conservation Reserve Program (CRP)

The Food Security Act of 1985, as amended, authorized the Conservation Reserve Program (CRP), which is implemented through the Farm Service Agency (FSA) on behalf of the Commodity Credit Corporation (CCC). The program is also governed by the regulations published in 7 CFR part 1410.

The CRP is a voluntary program that offers annual rental payments, incentive payments, and annual maintenance payments for certain activities, and cost-share assistance to establish approved cover on eligible cropland.

The program encourages farmers to plant long-term resource-conserving covers to improve soil, water, and wildlife resources. CCC makes available cost-share assistance in an amount equal to not more than 50 percent of the participant's costs in establishing approved practices. Contract duration is between 10 and 15 years.

CRP is administered by FSA. The Natural Resources Conservation Service, Cooperative State Research and Education Extension Service, state forestry agencies, and local soil and water conservation districts provide technical support. Private sector technical assistance vendors may also be available.

Eligible Land

To be eligible for placement in the CRP land must be cropland that is planted or considered planted to an agricultural commodity 4 of the 6 most recent crop years (including field margins) and which is physically and legally capable of being planted in a normal manner to an agricultural commodity; or

Marginal pastureland that is either certain acreage enrolled in the Water Bank Program or suitable for use as a riparian buffer to be planted to trees.

In addition to the eligible land requirements, cropland must meet one of the following:

1. Have a weighted average Erosion Index (EI) of 8 or higher or be considered highly erodible land according to the conservation compliance provisions;
2. Be considered a cropped wetland;
3. Be devoted to any of a number of highly beneficial environmental practices, such as filter strips, riparian buffers, grass waterways, shelterbelts, wellhead protection areas, and other similar practices;
4. Be subject to scour erosion;
5. Be located in a national or state CRP conservation priority area;
6. Be cropland associated with or surrounding noncropped wetlands.

Ranking Criteria

Offers for CRP contracts are ranked according to the Environmental Benefits Index (EBI). The designated technical agency collects data for each of the EBI factors, based upon the relative environmental benefits for the land offered. Each eligible offer is ranked in comparison to all others and selections made from that ranking.

EBI factors include:

- Wildlife habitat benefits resulting from covers on contract acreage;
- Water quality benefits from reduced erosion, runoff, and leaching;
- On-farm benefits of reduced erosion;
- Benefits that will likely endure beyond the contract period;
- Air quality benefits from reduced wind erosion;
- Benefits of enrollment in conservation priority areas where enrollment would contribute to the improvement of identified adverse water quality, wildlife habitat, or air quality; and Cost.

Producer Eligibility Requirements

A producer must have owned or operated the land for at least 12 months prior to close of the signup period, unless:

The new owner acquired the land as a result of death of the previous owner;
The only ownership change occurred due to foreclosure where the owner exercised a timely right of redemption in accordance with state law; or
The circumstances of the acquisition present adequate assurance to CCC that the new owner did not acquire the land for the purpose of placing it in CRP.

Rental Rates

The CCC bases rental rates on the relative productivity of soils within each county and the average dryland cash rent or the cash-rent equivalent.

The maximum CRP rental rate for each offer is calculated in advance of enrollment. Producers may offer land at that rate or may offer a lower rental rate to increase the likelihood that their offer will be accepted. In addition, CCC offers additional financial incentives of up to 20 percent of the annual payment for certain continuous signup practices.

Other Payments

The CCC encourages restoration of wetlands by offering a one-time incentive payment equal to 25 percent of the cost of restoring the hydrology of the site. This is in addition to the 50-percent cost share provided to establish approved cover.

3. CRP – Continuous Signup

Continuous signup provides management flexibility to farmers and ranchers to implement certain high-priority conservation practices on eligible land.

Offers are automatically accepted provided the acreage and producer meet certain eligibility requirements. The per-acre annual rental rate may not exceed CCC's maximum payment amount. While acceptance is not determined by a competitive offer process, producers may elect to receive an amount less than the maximum payment rate.

Additional Incentives Offered

Additional incentives are offered to encourage producers to participate in the CRP continuous signup.

Key Provisions

Key provisions of the continuous signup enhancements include:

An up-front CRP Signing Incentive Payment (CRP-SIP) of \$100 to \$150 per acre (depending on contract length) will be provided to eligible participants who enroll selected practices. This one-time payment will be made after the contract is approved and all payment eligibility criteria are met. A Practice Incentive Payment (PIP) equal to 40 percent of the eligible installation costs will be provided to eligible participants enrolling certain practices. This one-time payment will be issued after the practice is installed, eligible costs are verified, and other payment eligibility criteria are met. New rental rates have been established for certain marginal pastureland to better reflect the value of such lands to farmers and ranchers.

Eligible Land and Practices

To be eligible under continuous signup, land must first meet the basic CRP eligibility requirements. Acceptable land is:

- (1) Cropland that was planted or considered planted to an agricultural commodity 4 of the 6 most recent crop years (including field margins), which is also physically and legally capable of being planted in a normal manner to an agricultural commodity; or
- (2) Marginal pastureland that is suitable for use as a riparian buffer to be planted to trees.

The acreage must also be determined by USDA's Natural Resources Conservation Service (NRCS) to be eligible and suitable for any of the following practices:

- Riparian buffers;
- Filter strips;
- Grassed waterways;
- Shelter belts;
- Field windbreaks; and
- Living snow fences.

Producer Eligibility Requirement

If a tenant, the producer must be a participant with an eligible owner or operator.

Rental Rates

CCC bases rental rates on the average value of dryland cash rent or the cash rent equivalent for the past 3 years and adjusts rates to reflect the relative productivity of soils within each county. The maximum CRP rental rate is calculated in advance of enrollment. In addition, CCC offers additional financial incentives of up to 20 percent of the soil rental rate for field windbreaks, grass waterways, filter strips, and riparian buffers. An additional 10 percent may be added to the soil rental rate for land located within EPA-designated wellhead protection areas. A per-acre payment rate may also be added for maintenance of eligible practices. Offers for rents greater than the maximum rental rate are not considered, and the maximum rental rate, as a matter of general applicability, is not appealable. Only determinations by USDA officials regarding soil type and related soil type acreage may be appealed.

Cost-Share Payments

In addition to the payments described above, CCC will pay up to 50 percent of the eligible cost of establishing a permanent cover.

Length of Contracts

Contracts are for no less than 10 and no more than 15 years in duration.

Haying and Grazing

Haying and grazing is not permitted during the CRP contract period unless the Secretary of Agriculture permits it for emergency purposes.

Discussions with Natural Resource Conservation Service (NRCS) personnel about CRP qualification in the entire watershed, and in particular the Little Darby subwatershed, have identified the following factors which could encourage landowner participation in the program:

- CRP applications would not be limited or denied in the Darby Creek Watershed because of EBI scoring or soil characteristics. Conversely, they may score higher because of the aquatic biodiversity in the watershed and WRP Special Project Area status.
- Aggregate CRP acreage is limited to 25 percent of the “working land” in each county. This threshold has not been approached in any county in Ohio.
- Ohio has one of the highest average rental costs established for the CRP in the nation. It is presently \$81.

4. The Conservation Reserve Enhancement Program (CREP)

The Conservation Reserve Enhancement Program (CREP) is administered by the USDA and, as the name implies, is a significant enhancement or incentive above the CRP, which focused on broader and significant agricultural resource problems. The enhancement is achieved through the offer of greater landowner incentive payments for the use of conservation practices which are packaged as a suite. Each may have differing, and longer, contract periods and higher combined

payments from differing sources. The program requires a match, usually 25 percent, from the state and encompasses a defined watershed or subwatershed areas. Presently, each state is allocated up to 100,000 acres for potential inclusion into this program. Each state must make a detailed application which stresses its need to USDA to receive consideration for an appropriation. A formal contract between the state and USDA is negotiated and signed that commits each to fund the practices. Ohio presently has two CREP projects: Western Lake Erie Watersheds and the Upper Big Walnut Creek Watershed. These are discussed under Current Conservation and Land Use Planning Efforts.

While CREP is not currently offered in the Little Darby Creek Watershed, efforts are underway to authorize it for the Scioto River Watershed. This 30 county area encompasses the Big Darby Creek Watershed and its Little Darby Creek Sub-Watershed. There are four major steps that occur in establishing a CREP focus area. These are:

1. Establish a guidance committee including representatives from USDA, local and state government, Soil and Water Conservation District (sponsors the proposal to Washington), ODNR Divisions of Wildlife and Forestry, non-profit groups such as Ducks Unlimited, Pheasants Forever, and other interested parties. An outline is developed including such topics as a financial analysis and water quality analysis.
2. Transmit the proposal to USDA-Washington under cover of a letter from the Governor
3. USDA-Washington sends a team (Conservation and Environmental Planning Division) to talk with the local project representatives, seeking to strengthen the proposal
4. Contract negotiations between the local sponsor and USDA-Washington; if successful this leads to an accepted project

This process for the Lake Erie CREP (27 counties) took approximately 2.5 years. The Upper Big Walnut CREP project (five counties) took about one year and four months for final approval.

Ohio presently has approximately 30,000 acres of land remaining in its allocation that it may consider for enrollment in another CREP application. Tentatively, the Scioto River Watershed will encompass over 30 counties and be focused upon farmed riparian acreage. If prorated according to total riparian farmed land in each county, acreage that may be eligible for CREP in these counties is estimated to range from slightly less than 20 acres to just over 3,000 acres per county.

When authorized in an area, CREP is another option that farmers and ranchers may select to enhance their land; applicants may still enroll in general CRP or continuous signup CRP. However, CREP provides additional benefits not available through the general and/or continuous signup. Under CREP, applicants have flexibility to extend the duration of their conservation contracts and thus increase the sum total of rental payments. The enrollment process is on a continuous basis, and payments are at a higher rate.

Under CREP, unique conservation incentive arrangements are possible because the state and federal government (USDA) enter into contract for specific conser-

vation objectives. For example, Oregon took a particularly innovative approach to encouraging enrollment in a watershed program by offering up-front payments to all enrollees with adjoining land if half of the land along a 5 mile stream segment were enrolled prior to 2002. Hence, if a group of participants (or single participant) protects 50 percent of a continuous length of stream, all receive the bonus.

The following details regarding the two currently authorized CREP projects in Ohio may be of interest to those interested in CREP in the Little Darby Creek Watershed through the Scioto River Watershed proposal.

Western Lake Erie Watershed

The Conservation Reserve Enhancement Program (CREP) combines an existing Federal program, the Conservation Reserve Program (CRP), with State programs to provide a framework for the USDA to work in partnership with State and local interests to meet state-specific environmental objectives. The Conservation Reserve Program is a CCC program implemented through the Farm Service Agency (FSA).

The Department of Agriculture's (USDA) Commodity Credit Corporation (CCC) and the State of Ohio agreed on plans to implement a CREP project to improve the water quality of Lake Erie and 5,000 miles of Ohio streams in the western lake watershed and the Big Walnut watershed. This voluntary program will improve the water quality of Lake Erie and many of the streams and rivers that feed into it.

Under CREP, landowners and operators enter into 15-plus year contracts with CCC to convert cropland to native grasses, trees, and other conservation practices. In return, they receive annual rental payments, incentive payments for certain activities, and cost-share assistance to establish the conservation practices. Projects implemented through CREP usually require a state match of 25 percent.

Goals

The Ohio Lake Erie CREP has been designed to:

reduce the amount of sediment from entering Western Lake Erie by over 2,325,000 metric tons over the next 20 years;
significantly reduce the amount of nutrients and pesticides that enter the Western Lake Erie and its tributaries;
protect more than 5,000 linear miles of streams from sedimentation; improve wildlife habitat in the project.

Program Benefits

The CREP will provide several significant environmental benefits to Ohio's water bodies. Filter strips and riparian buffers will be planted next to streams, rivers and drainage ditches to stop sediment and pollutants from entering the water bodies. An estimated 5,000 linear miles of streams will be protected. Improved water quality will result from reduced nutrient loading, sediment loading, and pesticide runoff. Forested buffers will also help lower water temperatures and enhance wildlife habitat.

Little Darby Creek Conservation Through Local Initiatives

Eligible Conservation Practices

The following practices are eligible for the program:

- wetland restoration
- filter strips
- riparian buffers
- hardwood tree planting
- wildlife habitat improvement
- field windbreaks

Eligibility Requirements and Signup Date

Enrollment for the Ohio CREP has been on a continuous basis beginning May 1, 2000. Eligible land must be within the project area and meet the basic eligibility criteria for CRP and be suitable to be devoted to an eligible practice. Land must be either cropland or marginal pastureland. Cropland must have been planted to crops 2 of the past 5 years and be physically and legally capable of being cropped. Marginal pastureland can be enrolled provided it is suitable for use as a riparian buffer planted to trees. Lands that have an existing CRP contract or an approved offer with a contract pending are not eligible for CREP until that contract expires.

Payments under CREP

Participants in CREP are eligible for five types of payments: annual rental payments, incentive payments, maintenance payments, cost-share assistance payments, and State one-time payments. Annual rental payments will be based on the soil rental rate. The first three of these will be combined into a consolidated annual CRP rental payment.

In addition to the normal rental payment, CCC will make a special incentive payment:

- for land devoted to filter strips – 55 percent;
- for land devoted to wetland restoration, riparian buffer, field windbreak, wildlife habitat, or hardwood trees – 75 percent.

Producers would also receive an annual maintenance payment of \$5 per acre.

The CCC pays up to 50 percent of the establishment cost of conservation practices. The State may also provide up to \$40 per acre for the planting of warm season grasses.

The State also provides a one-time lump-sum payment of \$200 per acre for land devoted to filter strips and a \$500 per acre lump-sum payment for land devoted to hardwood tree planting, wildlife habitat improvement, field windbreaks, wetland restoration, and riparian buffers.

Program Cost

The estimated cost of the program is \$201 million. The Federal share is \$167 million, and the State share is \$34 million.

Upper Big Walnut Creek Watershed

The USDA and the State of Ohio have launched a \$13.2 million Conservation Reserve Enhancement Program (CREP) to protect the Hoover Reservoir, the primary drinking water source for Columbus, Ohio's 575,000 residents.

Benefits

The Ohio Upper Big Walnut Creek CREP will help farmers improve the water quality of streams near the Hoover Reservoir by reducing field runoff of pollutants. Currently, much of the existing watershed has no vegetative buffers. Through CREP, Ohio farmers will be able to buffer approximately 450 miles of watercourses. This will help lower water temperatures, increase dissolved oxygen, and provide additional wildlife habitat.

Goals

The goals of the Ohio Upper Big Walnut Creek CREP are to:

- Improve water quality for 575,000 Columbus residents by installing 3,500 acres of filter strips, riparian buffers, hardwood trees, wetlands, and wildlife habitat practices.
- Reduce by 30 percent sediment, nutrients, and agricultural chemical runoff in the Hoover Reservoir. Increase terrestrial and aquatic wildlife habitat.

Throughout the project, Ohio and the City of Columbus will conduct water quality monitoring to evaluate and record progress in achieving these goals.

Approved Conservation Practices

To better serve program goals, specific CRP conservation practices have been identified for inclusion in the program. The practices and associated acreage goals are:

- CP3A – Hardwood Tree Planting, 200 acres
- CP4D – Permanent Wildlife Habitat, 100 acres
- CP21 – Grassed Filter Strips, 2,300 acres
- CP22 – Riparian Forest Buffers, 700 acres
- CP23 – Wetland Restoration, 200 acres

CREP Payments

Ohio Upper Big Walnut Creek CREP participants will be eligible for the following types of USDA payments:

Signing Incentive Payment - A one-time payment of \$140 to \$150 per acre for land enrolled in a riparian forest buffer or grass filter strip practice. This payment is made soon after the contract has been signed and approved.

Practice Incentive Payment - A one-time payment equal to about 40 percent of the eligible cost for establishing the riparian buffer or filter strip. This payment

is in addition to up to 50 percent cost share assistance that USDA will provide for installing the selected practices.

Annual Rental Payment for the Life of the Contract - An incentive of 200 percent of the calculated annual soil rental rate for installing riparian buffers, restoring wetlands, and planting hardwood trees. An incentive of 175 percent of the calculated annual soil rental rate for installing grass filter strips and wildlife habitat is also available.

Cost Share Assistance of up to 50 percent for the installation of the eligible conservation practices on land that is retired.

In addition, Ohio will offer the following incentive payments:

A one-time incentive payment, through the local Soil and Water Conservation District and the City of Columbus, of \$60 per acre for land devoted to filter strips and wildlife habitat for practices that are enrolled at greater than an average of 66 feet in width.

A one-time incentive payment, through the local Soil and Water Conservation District and the City of Columbus, of \$60 per acre for land devoted to wetland restoration and for riparian buffers and hardwood tree plantings that are enrolled at greater than an average of 66 feet in width.

A direct payment, through the City of Columbus, to producers who sign up for a voluntary perpetual easement option. An appraisal process will determine easement payments and all costs associated with easement acquisition.

A one-time incentive payment, through the Ohio Division of Wildlife, of up to \$40 per acre for installing and seeding 100 percent warm season grasses.

A one-time incentive payment, through the Division of Wildlife and Ducks Unlimited, of up to \$500 for wetland restoration in exchange for a 20- or 30-year contract.

Program Cost

Based on the initial implementation of the Ohio CREP, which projects an enrollment of 3,500 acres, the expected combined financial Federal and State obligation will be approximately \$13.2 million. Of that amount, \$8.4 million will come from USDA and \$4.8 million from the State and local sources. This does not include any costs that may be assumed by producers. The USDA's share of the total program costs is approximately 64 percent and Ohio's share is approximately 36 percent.

Haying and Grazing

Haying and grazing are not permitted during the CRP contract period unless the USDA permits it for emergency purposes under normal CRP rules.

Other USDA programs such as CRP and WRP have modest activity in the watershed. With the passage of the Farm Security and Rural Investment Act of 2002, additional funding for all current programs and new program opportunities will become available.

The CREP application process in Ohio is coordinated by Chris Kauffman, Grants Coordinator with the ODNR Division of Soil and Water Conservation, 4383 Fountain Square Drive, Building B-3, Columbus, Ohio 43224-1362 (phone 614/265-6914).

C. Conservation Security Program

The Farm Bill establishes this program for fiscal years 2003-2007 to assist agricultural producers implementing and maintaining new or existing conservation practices on working lands. Lands enrolled in CRP, WRP and GRP, and lands that have not been cropped for at least four of the six years prior to enactment are not eligible. The purpose of the CSP is to provide incentive payments to producers who adopt and/or maintain conservation practices on private working lands. Producers may choose from one of three tiers of conservation practices and systems, with the more complex and comprehensive tiers receiving higher incentive payments.

2. U.S. Fish and Wildlife Service

a. Partners for Fish and Wildlife

The Partners for Fish and Wildlife program provides landowners with technical assistance and direct cost sharing for wetland, native grassland, and riparian habitat restoration/ protection projects on private and non-state public land. Landowners may submit application to any Service office in the state for potential projects. A Service biologist will review the project or work in collaboration with a



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local Soil and Water Conservation District, or Ohio Division of Wildlife biologist to assess the restoration potential of the site. Projects are most often cost shared at a rate of 50 percent, however the rate may be higher depending upon a project. If a project is approved for funding a landowner will be asked to sign a 20 year Habitat Development Agreement which commits them to maintain the project for that length of time. This is the contractual period for all wetland restorations. Native grassland and riparian habitat agreements may be less. The Service presently has multi-agency cooperative agreements with Ohio DNR agencies and private organizations for livestock exclusion in an 8 county area and for wetland and native grassland restoration throughout the state. Information and applications may be obtained by contacting any U.S. Fish and Wildlife Service office in the state. The Ohio Private Lands Office may be reached at 513-529-8398.

b. Federal Aid to Fish and Wildlife Restoration

The Federal Aid in Wildlife Restoration Act was passed by Congress in 1937. It directed an existing federal excise tax on firearms and ammunition to fund State wildlife projects, enabling State agencies to move beyond law enforcement and actively restore our natural heritage. More than \$3.2 billion have been used for wildlife since the program was established.

The program has Protected more than 5 million acres of habitat; improved wildlife management through research; helped monitor the status of wildlife populations nationwide on a state-by-state basis; developed public shooting ranges; and, graduated 750,000 students each year from a hunter education courses.

Federal Aid in Sport Fish Restoration Program helps improve fisheries management through research; educate people about aquatic resources; keep the water clean by building 2,200 pump out stations and 14,000 dump stations for boat sewage; and protects, manage, and restore aquatic habitat.

1) *Grants to Restore Fish and Wildlife Habitat*

Partnerships For Wildlife Program

Eligible Participants: States, United States Insular Territories, and the District of Columbia

Funding: Federal Funds are provided through 2003. The state portion must be from a non-federal source, and not be in the form of an in-kind match (contribution of materials, equipment, services, land or other real property). Private contributions however, may be in the form of cash donations, and in-kind contributions necessary for the project.

Matching Requirements: State and private sources must each pay at least one-third of project costs, EXCEPT where two or more states cooperate on projects, the projects may be funded with 30 percent state matching, 30 percent private matching, and 40 percent federal share. Certification of state and private matching funds must be made prior to making federal funds available for obligation.

Project Application/Selection Process: Grantees submit project proposals to the Regional Federal Aid Office for preliminary review and determination that the project is eligible under the Act. Eligible projects may include determination of range and location of fish and wildlife populations and habitat, identification of significant problems, actions to conserve fish and wildlife species and their habitat, or actions providing for public use and enjoyment of these resources. The project proposals are then forwarded to the Service's Washington D.C. Office for review by a committee composed of representatives from the U.S. Fish and Wildlife Service, the National Fish and Wildlife Foundation, the International Association of Fish and Wildlife Agencies, and three randomly selected states. The committee's recommendations are forwarded to the Director of the U.S. Fish and Wildlife Service who subsequently notifies the states of approval, and the amount of funding awarded to projects.

Ron Schaefer, State Federal Aid Coordinator, ODNR, Division of Wildlife
614/265-6337

USFWS Federal Aid Contact: 612/713-5145

Section 6 Threatened And Endangered Species Grants

Eligible Participants: Any state or territory which establishes and maintains an adequate and active program for the conservation of endangered and threatened species is eligible. The state natural resource agency and the U.S. Fish and

Wildlife Service must enter into a Cooperative Agreement, which specifies the state's authority for management of endangered and threatened species, before the Service can provide funds for projects proposed by the state. Continued eligibility is renewed annually by reviewing any changes to the state's management authority or to their endangered and threatened species program.

Funding: Funds for Section 6 are appropriated annually as part of the Service's budget process. The Service's Washington Office distributes the funds to the regional offices based primarily on the number of listed species in each region, and total number of Section 6 Cooperative Agreements with the states in each region. The Great Lakes-Big Rivers Region usually receives about \$450,000 to 500,000 in Section 6 grants. However, the proposed projects received from the states usually total more than three times that amount.

Matching Requirements: The Federal share of a project cannot exceed 75 percent unless two or more adjacent states jointly prepare a cooperative project in which they have a common interest. The maximum Federal share of a joint project in which two or more states are actively involved is 90 percent.

Project Application and Selection Process: Annually, the states develop project proposals in coordination with the Service Endangered Species Field Offices to ensure the proposals are eligible and address high priority activities. The proposals are submitted to the Regional Office. All proposals are ranked according to a set of criteria which include: The degree of threat of the species, likelihood of recovery, consistency with Recovery Plans, listing status of the species, and so on. The Regional Director makes the final decision regarding which projects receive funds and in what amount.

Federal Aid Contact: 612/713-5135

Other Grants And Cost Sharing Programs

North American Wetlands Conservation Act (NAWCA)

Available to private and public organizations and individuals who have developed partnerships to carry out wetlands conservation projects.

Grants to States for Fish and Wildlife Restoration

These grants are based upon an established formula that returns excise tax funds. Projects are submitted by the states through the Services' Federal Aid Office. These grants are available to restore, protect and manage aquatic and terrestrial habitat, education, and improve fish and wildlife management through research.

Habitat Conservation Planning Assistance

These are competitive grants available through states with which the Service has a current Cooperative Agreement for private landowners, communities and local governments to aid in the long term protection of threatened and endangered species.

Habitat Conservation Plan Land Acquisition Assistance

Same as 3) above except the grants are for planning assistance.

Recovery Plan Land Acquisition Assistance

Same as 3) above except the grants are for land acquisition where an approved threatened and endangered species Recovery Plan has been approved.

For More Information:

Grant Writing: <http://midwest.fws.gov/FederalAid/programs/guidelines.htm>

Programs: <http://midwest.fws.gov/FederalAid/programs/index.htm>

c. Endangered Species Program

Private Stewardship Program – Grants And Other Assistance For Private Landowners

The Private Stewardship Program provides grants and other assistance on a competitive basis to individuals and groups engaged in local, private, and voluntary conservation efforts that benefit federally listed, proposed, or candidate species, or other at-risk species. A diverse panel of representatives from State and Federal government, conservation organizations, agriculture and development interests, and the science community will assess applications and make recommendations to the Secretary of the Interior, who will award the grants.

Contact: http://endangered.fws.gov/grants/private_stewardship.html

Endangered Species Grants To States, Territories And Private Landowners (See Federal Aid also)

The Cooperative Endangered Species Conservation Fund (section 6 of the ESA) has been available for several years to provide grants to States and Territories to participate in a wide array of voluntary conservation projects for candidate, proposed and listed species.

Contact: <http://endangered.fws.gov/grants/index.html>

Environmental Contaminant Monitoring

Grants and Cost sharing assistance may be available from the Division of Ecological Services Field Office located in Reynoldsburg, OH. Assistance and cost sharing may be provided for contaminant monitoring/testing, equipment, and field staff support.

Contact: 614-469-6923

d. Flexible Funding Grants/Cost Sharing Programs

In most years the Service is appropriated funding through several programs such as Challenge Cost Share program, Non-Game Migratory Bird cost sharing program, Clean Water Action Grant program, etc.. These programs are available in cooperation with Service activities. They are not purely grants to private organizations or states, but allocated to Service offices to accomplish work

specifically needed to carry out the missions of those offices. They can be used to support assistance from state and private sources a Service office needs to implement its mission.

Contact: the nearest Service facility.

3. Other Federal Assistance

a. USEPA (See Ohio Environmental Protection Agency)

Contacts for all USEPA Grants are through the OEPA .

b. Federal Highway Department Programs

Assistance is available for some trail and road enhancement projects through the Transportation Enhancement Act (TEA) 21 program. More information on this program can be found at: <http://refuges.fws.gov/roads/links.html>.

c. National Park Service – Wild and Scenic Rivers

While grants are not available through the Wild and Scenic Rivers program, the National Park Service can provide technical assistance for work in the corridors. Contact: Angie Tornes, Rivers and Trails Program, National Park Service, 310 West Wisconsin Avenue, Suite 100E, Milwaukee, WI 53203. Telephone: 414/297-3605.

D. Non-Profit Assistance

Non-profit groups are a tremendous source of assistance, both technical and financial. A few organizations that have been active in conservation projects throughout Ohio include the following:

1. The Ohio Environmental Council

The mission of the Ohio Environmental Council is to inform, unite, and empower Ohio citizens to protect the environment and conserve natural resources. The Council is a lobbying organization and clearinghouse supporting/monitoring important environmental issues and agency activities throughout the state.

Contact: The Ohio Environmental Council, 1207 Grandview Ave., Ste. 201, Columbus, OH 43212-3449; (614) 487-7506; Fax: (614) 487-7510614-487-7506

2. National Fish and Wildlife Foundation (NFWF)

The National Fish and Wildlife Foundation supports the conservation of native fish, wildlife, plants and their habitats by attracting diverse investments to conservation and encouraging locally supported stewardship on private and public lands. Congress created the Foundation in 1984 to benefit the conservation of fish, wildlife, and plants, and the habitat on which they depend. The Foundation does not support lobbying, political advocacy, or litigation.

The Foundation awards funds to projects benefitting conservation education, habitat protection and restoration, and natural resource management. Federal and private funds contributed to the Foundation are awarded as challenge grants to on-the-ground conservation projects.

The Foundation fosters partnerships among federal, tribal, state, and local governments, corporations, private foundations, individuals, and non-profit organizations. Funds have been awarded to more than 1,100 grantees, including government agencies, educational institutions, and domestic and international conservation organizations. More information may be obtained at www.nfwf.org, by writing or calling the Midwest/Mississippi River Valley Regional Office, National Fish and Wildlife Foundation, 1 Federal Drive, Ft. Snelling, MN 55111; 202-857-0166; Fax: 612-713-5308

The following is a list of grant and cost sharing programs offered by the NFWF.

General Challenge Grant Program

The National Fish and Wildlife Foundation funds projects to conserve and restore fish, wildlife, and native plants through challenge grant programs. The Foundation awards challenge grants to projects that address priority actions promoting fish and wildlife conservation and the habitats on which they depend, work proactively to involve other conservation and community interests, leverage Foundation-provided funding, and evaluate project outcomes. Federal, state, and local governments, educational institutions, and nonprofit organizations are welcomed to apply for a general challenge grant throughout the year, using the General Challenge Grant Guidelines.

Bring Back the Natives

Supports on-the-ground habitat restoration projects that benefit native aquatic species (e.g., native fish, aquatic insects, mollusks, and amphibians) in their historic range.

FMC Corporation Bird and Habitat Conservation Fund

The National Fish and Wildlife Foundation and FMC Corporation have formed a multi-year partnership to fund habitat conservation program benefitting birds, with a particular focus on prairie species and waterfowl.

Freshwater Mussel Fund

The National Fish and Wildlife Foundation and the U.S. Fish and Wildlife Service are administering a fund to enhance and protect freshwater mussel resources. The fund is to be used for the enhancement and protection of the mussel resource and the restoration and cultivation of mussel shell populations allegedly affected by illegal acts.

Five-Star Restoration Challenge Grant Program

Provides modest financial assistance on a competitive basis to support community-based wetland, riparian and coastal habitat restoration projects that build diverse partnerships and foster local natural resource stewardship through education, outreach and training activities.

Native Plant Conservation Initiative

Supports on-the-ground conservation projects that protect, enhance, and/or restore native plant communities on public and private lands. Projects typically fall into one of three categories and may contain elements of each: protection and restoration, information and education, and inventory and assessment.

Natural Resources Conservation Service: Conservation on Private Lands

The goal of this program is to support high quality projects that engage private landowners, primarily farmers and ranchers, in the conservation and enhancement of wildlife and natural resources on their lands.

The Pathways to Nature Conservation Fund

Is a partnership between the more than 270 Wild Birds Unlimited, Inc. franchises and the National Fish and Wildlife Foundation. The Pathways to Nature™ Conservation Fund offers grants to enhance environmental education activities and bird and wildlife viewing opportunities at significant nature tourism destinations in the United States and Canada.

Unified Request for Proposals

This is an annual call for fish, wildlife, and plant conservation projects to be funded through partnership programs between the National Fish and Wildlife Foundation and the Bureau of Land Management, Bureau of Reclamation, National Park Service, U.S. Fish and Wildlife Service, and USDA-Forest Service. Each partnership programs has a distinct set of partners and objectives and thus consider a unique set of proposals.

3. The Nature Conservancy–Ohio Chapter

The Nature Conservancy's national mission statement states why they exist, namely, "To preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive." The Nature Conservancy-Ohio Chapter provides technical assistance to interested parties within important resource areas that they have an interest. They also will purchase fee or easement interests on lands that support their objectives. They manage a world-wide system of preserves that protect unique and endangered ecosystems.

Contact: The Nature Conservancy-Ohio Field Office, 6375 Riverside Drive, Suite 50, Dublin, OH 43017, (614) 717-2770

4. Land Trusts

Conservation Land Trusts are usually empowered to purchase land, acquire land through donations, secure conservation easements on land and monitor the terms of these easements, and work in partnership with private and governmental conservation agencies.

Land trusts vary greatly in size. Over half are completely volunteer, others have only a director or one or more part-time staff members, a few have a large staff,

prominent board of directors and a large membership. Annual budgets range from under \$10,000 to over \$1 million. 32% operate with budgets of \$100,000 or more.

84% of all land trusts accept land donations. 75% accept conservation easements. In both instances donors can receive significant tax benefits based on the value of the donated land or easement.

63% of land trusts buy land for conservation. 70% of the funds for purchases come from contributions from members and individual donors in the community. Other funds come from government agencies, foundations, and corporations. Land trusts also borrow money from banks, foundations, and individuals to buy land. Loans are repaid either through fund raising, sales to conservation buyers or, in the case of advance acquisitions for local, state or federal conservation agencies, when public funds are available and the property is repurchased by the government.

Although independent, land trusts frequently work with each other, with national conservation organizations, and with government agencies on important projects.

Presently, there are no active Land Trusts in the Darby Creek watershed.

Some examples of successful local and national Conservation Land Trusts are:

Three Valley Conservation Trust
P.O.Box 234 5920 Morning Sun Road
Oxford, OH 45056
513-524-2150

The Nature Conservancy
Ohio Chapter
6375 Riverside Drive, Suite 50
Dublin, OH 43017

The Conservation Fund
Suite 1120
1800 N. Kent Street
Arlington, Va. 22209
www.conservationfund.org

For More information about starting a land trust contact:

Land Trust Alliance
Renee Kivikko
Program Director
6869 Sprinkle Rd
Suite C
Portage, MI 49002
269-324-1683
ltamw@lta.org

Additional examples of land trusts are presented in Chapter 9, Success Stories.

Chapter 9: Success Stories

One of the most effective ways to learn is to learn from others. The old adage about 'not reinventing the wheel' is based in efficiency and common sense. Listed below are several examples of projects to conserve resources that have been successful. As many have found, one shoe does not fit all. What works in one area may not work elsewhere. And no one solution rarely resolves all issues. Additional examples of Ohio watershed projects are provided in Appendix 2.

Malpai Borderlands Project: A Stewardship Approach to Rangeland Management

The information included in this overview is based on information provided in the U.S. Forest Service's website: <http://www.fs.fed.us/eco/malpai.htm> and the U.S. Geological Survey website: <http://geochange.er.usgs.gov/sw/responses/malpai/>

The Malpai Borderlands Project is a community-based ecosystem management effort that is led by a number of landowners within the planning region. The region includes approximately 800,000 acres extending along the Mexican border from near Douglas, Arizona, to Antelope Wells, New Mexico, and north to New Mexico Highway 9. Ownership in the region includes about 57 percent private land, 20 percent state trust lands, 11 percent National Forest, and 7 percent Bureau of Land Management-administered land. The project includes a number of private sector partners, and all of the local, state and federal land management agencies.



USFWS Photograph by Tom Larson

The concept of the Malpai Borderlands Project began with a group of neighbors who were concerned about perceived threats to their culture and lifestyle, which included concerns about the future of public land grazing in the West as well as environmental and economic issues. The group's goal is to "...restore and maintain the natural processes that create and protect a healthy unfragmented landscape to support a diverse, flourishing community of human, plant, and animal life in our Borderlands region. Together we will accomplish this by working to encourage profitable ranching and other traditional livelihoods which will sustain the open space nature of our land for generations to come."

The group began an ecosystem planning effort and gained funding and research assistance from the Natural Resource Conservation Service, the Coronado National Forest, the University of Arizona, New Mexico State University, the University of New Mexico, and the U.S. Geological Survey. At the same time,

Little Darby Creek Conservation Through Local Initiatives

The Nature Conservancy had purchased a 300,000-acre ranch in the heart of the Borderlands. The purchase was an effort to protect the biological uniqueness of an ecologically rich area. The Conservancy then found a buyer who shared the organization's vision for the property. The buyer established the Animas Foundation to demonstrate sustainable agriculture in harmony with the environment.

Issues being addressed by the Malpai Group include:

- Shrinking open spaces in the southwest
- Growing opposition to ranching
- Lack of understanding about ranching values and way of life
- Increasing developments of subdivisions
- Need to improve grazing lands
- Need for coordinated fire control management
- Droughts

Accomplishments include:

- The Group developed a joint fire management plan for much of the area.
- A "grass banking" program was developed to help drought-stricken ranchers and protect over grazed land,
- Re-seeding and good management practices programs.
- Cooperative relationship with research and management entities interested in resource management and protection.

Project Strengths:

- It was a local initiative, not solely a government project.
- There were dedicated agency representatives.
- It was flexible.
- There was recognition that every area is different.

Contact:

See the web sites referenced above.

University of Wisconsin Extension

This summary is based on the University of Wisconsin Extension website: <http://clean-water.uwex.edu/basins/bsuccess/lakes.htm>

In Wisconsin's Washburn County, development trends shifted toward larger homes, larger landscaped lots, and more shoreland alterations. The Washburn County Zoning Department and the Department of Natural Resources noted an increase in the number of building permits requested for shoreland areas. Concern about increased shoreland disturbance prompted Long Lake, a local lake association, to develop a strategy for stopping inappropriate development practices.

The group gathered data and presented its findings to the Washburn County Board. The Board was persuaded to form a citizens advisory committee which met monthly to develop a set of recommendations for public review. After

several public hearings, the County adopted a lakes classification system and a new set of shoreland protection rules.

As lakes protection issues gained momentum, a local lake leader helped establish the County Lakes and Rivers Association. The group is now providing leadership and developing educational strategies that will support the County's new shoreland ordinance rules.

The process illustrated that citizens make a difference in environmental protection issues. The process as well as the outcome benefitted from government agencies and experts taking a support role rather than a leadership role in the process.

Outcomes:

- Increased awareness of the impacts of shoreland development among residents and local decision-makers.
- The County adopted a lakes classification system and a more protective shoreland ordinance.
- A county-wide lakes and rivers association formed to continue addressing lake protection concerns.

Project Strengths:

- Citizens were involved constructively
- There was organized leadership (group and individual)

Contact:

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The Potomac Conservancy

Information for this summary is based on The Potomac Conservancy website:
<http://www.potomac.org>

The Potomac Conservancy is a regional land and water conservation organization formed to protect and enhance the natural, scenic, recreational and historical qualities of the Potomac River and watershed lands. Its programs include a comprehensive land protection program, land and water restoration projects, counseling and other conservation support services to more than 70 other land trusts in four states, volunteer and education programs, and partnering with other land trusts, conservation organizations, and local, state and federal agencies.

The Conservancy's Community Action program seeks to educate, inspire and engage Potomac watershed residents of all ages through a wide variety of hands-on programs that benefit the Potomac River. Fostering a conservation ethic among participants contributes heavily to the restoration of degraded lands, protection of sensitive habitats, improvement of water quality, and enhancement of recreational opportunities.

The Conservancy's Land Protection Initiatives include work on the Shenandoah, one of the most degraded watersheds in Virginia. While the area's agricultural heritage allowed the Shenandoah to maintain its rural character, it has also introduced the dangers of erosion, nutrient and sediment contamination, and floodplain encroachment. The Conservancy's primary goal is to increase private participation in permanent land protection in critical watersheds by expanding public knowledge, understanding, acceptance, and adoption of conservation alternatives. The agricultural community is beginning to take advantage of opportunities for financial benefits in exchange for restoration of riparian forest. Involvement in incentive programs that pay farmers to establish forests along rivers and streams has risen dramatically.

Projects include:

- Assisting in targeted landscape inventory and assessment of the sub-watershed.
- Linking private landowners with opportunities for habitat restoration and permanent protection through community outreach.
- Opening a Shenandoah Office to provide a local presence for promoting permanent protection options for farmers and other landowners.

Project Strengths:

- Wide range of partners
- A local office was opened to assist landowners

Contact:

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Massachusetts Wetlands Restoration Program

This summary is based on information provided through the Massachusetts Wetlands Restoration Program website: <http://www.state.ma.us/envir/mwrp/index.htm>

The Massachusetts Wetlands Restoration Program (MWRP) was established in 1994 within the Executive Office of Environmental Affairs to implement a voluntary program for restoring the Commonwealth's wetlands. The group is responsible for facilitating the implementation of priority restoration projects through GROWetlands, or Groups Restoring Our Wetlands Initiative. GROWetlands was founded on the belief that citizen activists are the backbone of the Massachusetts watershed-based wetlands restoration effort. The MWRP project team includes a Project Sponsor and federal, corporate and non-profit partners. As the entity responsible for seeing a project through from proposal to completion, the Project Sponsor is the most important part of the team. Project Sponsors have included private landowners, local conservation commissions, land trusts, state or federal agencies, civic groups or businesses.

The kinds of assistance GROWetlands provides depends on the needs. Project Sponsors may be eligible to receive support for their efforts to:

- Identify appropriate funding opportunities and apply for grants.
- Obtain technical assistance such as engineering, biological assessments, hydrological evaluations, surveying, project design, and project monitoring.
- Developing and implementing public education and outreach strategies.
- Applying for and obtaining permits.
- Coordinate the project overall.

Project Strengths:

- Multiple, diverse project sponsors
- Assistance in obtaining funding
- Citizen involvement
- Responsibility for implementation given to a specific office



USFWS Photograph by Tom Larson

Contact:

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 Executive Office for Environmental Affairs
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Upper Valley Land Trust

Hanover, New Hampshire

Information for this summary is based on the Upper Valley Land Trust website:
<http://www.uvlt.org/html/about.html>

The Upper Valley Land Trust is a non-profit organization supported by more than 1,000 members. The Land Trust works with individuals and communities to permanently protect land and water resources in 40 towns within the Upper Valley region in Vermont and New Hampshire.

The Land Trust uses conservation easements to protect specific parcels of land by restricting development and other activities that may degrade natural resources. Private landowners who choose to donate or sell a conservation easement work with Land Trust staff to ensure that the restrictions meet their goals and are appropriate to unique characteristics of their property. Land remains in private ownership, and the restrictions remain in force in the future as it is transferred from one owner.

Project Strengths:

- Specific focus of the organization is on permanent protection of land and water resources
- Staff is available to implement the details

Contact:

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Additional information about land trust can be found at the Ohio State University Extension Internet web site at <http://ohioline.osu.edu/cd-fact/1262.html>. It addresses frequently asked questions about land trusts and provides some additional references.

Chicago Wilderness

This summary is based on the Chicago Wilderness website: <http://www.chicagowilderness.org/index.cfm>

Chicago Wilderness is a regional nature reserve that includes more than 200,000 acres of protected natural lands stretching from southeastern Wisconsin through northeastern Illinois and into northwestern Indiana. The Chicago Wilderness coalition is an alliance of more than 140 public and private organizations working together to protect, restore, study and manage natural ecosystems in the Chicago region for the benefit of the public. Partners have collaborated on more than 160 projects.

One such project is Outreach and Technical Assistance to Local Governments. Chicago Wilderness believes that it is critical that local and regional development policies reflect the need to restore and maintain natural areas and biodiversity. This project provides outreach and technical assistance to local governments and related organizations on behalf of Chicago Wilderness. The partners are working to educate and energize local officials regarding the significance and benefits of biodiversity protection in communities. They are also helping identify techniques and mechanisms through which local governments can collaborate with each other and with conservation organizations. The project calls attention to local examples of sustainable development and conservation initiatives that can serve as models for future community-level conservation efforts. Representatives of the Northeastern Illinois Planning Commission are coordinating this project.

Project Strengths:

- An alliance of more than 140 public and private organizations
- Provides outreach and technical assistance
- Specific alliance representatives coordinate each project

Contact:

For more information about Chicago Wilderness coalition sustainability initiatives, contact: Irene Hogstrom Sustainability Team Coordinator Phone: (312) 454-0400; e-mail: ireneh@nipc.org

The Land Trust Alliance

Information for this overview is based on The Land Trust Alliance website: <http://www.lta.org>

The Land Trust Alliance is a leader in the private land conservation movement. It promotes voluntary land conservation across the county and provides resources, leadership and training to nonprofit, grassroots land trusts. Programs include direct grants to land trusts, training programs, technical assistance, and one-on-one mentoring to organizations.

Project Strengths:

Provides direct grants to land trusts
Mentoring, training, and technical assistance

Contact:

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Program Director
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Other Examples

The examples referenced above are but a few of the variety of successful partnerships and community efforts to conserve natural resources. Appendix 2 includes several examples of watershed groups in Ohio that are working to preserve and improve water quality and the health of their watersheds. Examples include the Sunday Creek Watershed Group, Little Beaver Creek, Stillwater Watershed Project, Little Miami River Partnership, Miami Conservancy, East Branch Sugar Creek Watershed, and the Wolf Creek Awareness and Resource Evaluation (WeCARE) Project.

The Ohio State University watershed network web site at <http://ohiowatersheds.osu.edu/> is a good resource for information on community-based watershed management. The Watershed Profiles in Appendix 2 are taken from that web site.

Chapter 10: Conclusion

People have been living in the Little Darby Creek area for centuries. With that extended habitation, significant changes have occurred, transforming the landscape from wetlands, prairie, and forest to the current landscape dominated by row-crop agriculture with isolated remnants of the once dominant natural habitats. The changes that occurred were what the country and the residents of the times needed.

The residents of the Little Darby Creek Watershed are nearing the 200th anniversary since Jonathon Alder, the first white settler, built his cabin and moved his family to Madison County. The rural way of life and a thriving agricultural community is treasured by the community. Little Darby Creek with its diversity of aquatic species is a resource also treasured by the community.



USFWS Photograph by Tom Larson

What changes will the next 200 years bring? What impression of the landscape will the visitor in 2202 have as they pass through the area? Will they see crops and farms? Will they still hear about the quality of Little Darby Creek and the diverse life teaming within its waters? The discussions that revolved around a wildlife refuge proposal the past four years relate to answering these questions. Many of the residents of Madison and Union County and their elected officials have affirmed that they do value

agriculture, the rural character of the counties, and their natural resources. But they have clearly stated that they preferred to protect these resources through locally driven conservation action, not involving the establishment of a national wildlife refuge.

The U.S. Fish and Wildlife Service has listened to the community and has chosen to support local conservation action. This Report is intended to assist those local efforts. In compiling the information included in the Report, the diversity and sometimes complexity of the programs available was striking.

Coordinated action over a large area to accomplish common goals is always a challenging proposition. With the complexities of the myriad of programs, the diverse interests and challenges found in the Little Darby Creek Watershed, and the pressures of time fueled by a rapidly growing and expanding population, action is not only challenging but critical. Zoning regulations have been strengthened, CREP and other programs will help. But to keep the focus for the long haul, an ongoing coordination of efforts is necessary. In reviewing successful local action in other areas, a common thread in many of the projects is that there was a coordinator, or a coordinating group that worked effectively together. County government cannot preserve the agricultural and natural resource values

alone. State or federal government cannot do it alone. Individuals and non-governmental groups cannot do it by themselves. But working together, it can be done. Secretary of Interior Gale Norton has advocated Conservation through Cooperation, Consultation, and Communication. The Secretary's Four C's could serve as a guiding principle to bring the community together in a coordinated effort to preserve their shared conservation values. Through such a coordinated effort, the future can include agriculture and natural resources. The 10th generation resident of Madison and Union Counties in 2202 can stand on her porch and still see her neighbor working his field, a Little Darby Creek teeming with life, and a Great Blue Heron rising from the grass.

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