U.S. Fish & Wildlife Service

Cherry Valley National Wildlife Refuge

Draft Feasibility Study and Environmental Assessment

October 2008

This blue goose, designed by J.N. "Ding" Darling, has become the symbol of the National Wildlife Refuge System.

The U.S. Fish & Wildlife Service is the principal federal agency responsible for conserving, protecting, and enhancing fish and wildlife and their habitats for the continuing benefit of the American people. The Service manages the 97-million acre National Wildlife Refuge System comprised of more than 548 national wildlife refuges and thousands of waterfowl production areas. It also operates 69 national fish hatcheries and 81 ecological services field stations. The agency enforces federal wildlife laws, manages migratory bird populations, restores nationally significant fisheries, conserves and restore wildlife habitat such as wetlands, administers the Endangered Species Act, and helps foreign governments with their conservation efforts. It also oversees the Federal Aid Program which distributes hundred of millions of dollars in excise taxes on fishing and hunting equipment to state wildlife agencies.

This draft document is intended to help fulfill the purpose of the Cherry Valley National Wildlife Refuge Study Act of 2006 to complete a study evaluating fish and wildlife habitats in Cherry Valley, Pennsylvania, for their potential acquisition by the U.S. Fish and Wildlife Service for inclusion in the National Wildlife Refuge System. Upon release, public meetings will be held and this draft document will be available for comment for 30 days. After the 30-day comment period, comments received will be summarized, and, where appropriate, addressed in the final Study Report and Environmental Assessment.

Cherry Valley National Wildlife Refuge Draft Feasibility Study and Environmental Assessment

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Abstract: In accordance with the National Environmental Policy Act (NEPA), as amended, the Service has developed a draft EA in response to the Cherry Valley National Wildlife Refuge Act of 2006 (Study Act). This document offers proposed refuge purposes, vision, and goals. It also presents a detailed description of the physical, biological, and socioeconomic environment within which the study takes place, thus defining the area that may be affected by a refuge. Most important, the study proposes the establishment of a refuge (Alternative B), which is believed by the Service to be the best alternative for fulfilling the intent of the Study Act, and the proposed refuge purposes, vision, and goals. In addition to the proposed action, two other reasonable alternatives are presented for comparison purposes. The three alternatives are summarized briefly below:

- Alternative A: No Refuge -- This is the "No Action" alternative. It serves as a baseline to which the other alternatives are compared. In this alternative, there would be no new refuge and no designated acquisition boundary. Habitat protection and management would continue to be done by existing organizations and government programs.
- Alternative B: Cherry Valley Diverse Habitat Complex -- This is the proposed action. It proposes protection of up to approximately 20,466 acres for a potential refuge. Protection of lands would be done through fee title (about 50 percent of the acres) and conservation easements (about 50 percent of the acres). This alternative would provide protection for more extensive habitat areas, compared to Alternatives A and C, that potentially would better enable the Service to meet the needs of both rare and more common species of wildlife.
- Alternative C: Cherry Valley Wetlands and Ridge Forests Complex -- This alternative proposes protection of up to approximately 14,124 acres for a potential refuge. Protection of lands would be done through fee title (about 65 percent of the acres) and conservation easements (about 35 percent of the acres).

Department of the Interior
U.S. Fish and Wildlife Service

Cherry Valley National Wildlife Refuge
Draft Feasibility Study and Environmental Assessment

October 2008

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This draft document is intended to help fulfill the purpose of the Cherry Valley National Wildlife Refuge Study Act of 2006 to complete a study evaluating fish and wildlife habitats in Cherry Valley, Pennsylvania, for their potential acquisition by the U.S. Fish and Wildlife Service for inclusion in the National Wildlife Refuge System. Upon release, public meetings will be held and this draft document will be available for comment for 30 days. After the 30-day comment period, comments received will be summarized, and, where appropriate, addressed in the final Study Report and Environmental Assessment.

Executive Summary

The Cherry Valley National Wildlife Refuge Study Report and draft Environmental Assessment (Study Report) helps fulfill the purpose of the Cherry Valley National Wildlife Refuge Study Act of 2006 to complete a study evaluating fish and wildlife habitats within Cherry Valley, Pennsylvania, for their potential inclusion by the U.S. Fish and Wildlife Service (Service, we, our) in the National Wildlife Refuge System. Consideration of a refuge within Cherry Valley is largely based on its known wildlife and natural habitat resources.

If creation of a refuge is approved, a boundary line for the refuge would be established that authorizes acquisition of land within that boundary. Landowners within a refuge acquisition boundary are under no obligation to sell their property to the Service. The Service would only acquire land from willing sellers, and can make offers to purchase land from or enter into management agreements with willing landowners within the approved boundary. A new refuge would officially be created upon acquisition of the first parcel of land within the acquisition boundary. Management of a new refuge would follow thereafter, initially under a Conceptual Management Plan, and ultimately under a more detailed Comprehensive Conservation Plan.

The National Environmental Policy Act of 1969 (NEPA) requires federal agencies to consider the environmental effects of any proposed federal action, as well as reasonable alternatives to the proposed federal action, prior to initiating the federal action. Creating a new refuge is a federal action; therefore, this document has been structured as an Environmental Assessment to meet the requirements of NEPA and the Cherry Valley National Wildlife Refuge Study Act. The Service will accept public comments on this draft document during public meetings and a 30 day comment period. Comments received will be summarized, and, where appropriate, addressed in the final Study Report and Environmental Assessment**.** After the public comment period is completed, the document will be submitted to Service's headquarters for additional review and a final decision by the agency's Director.

The Study Report provides an “Introduction” and is presented in six chapters: 1. Study Purpose and Planning Considerations, 2. Affected Environment, 3. Alternatives, 4. Environmental Effects, 5. List of Preparers, and 6. Consultation and Coordination with Others. It also includes a number of appendices that provide further information on the study. The essential outline of the study enables the reader to understand the reason for the study, where the proposed refuge may be established, why Cherry Valley is being evaluated for a national wildlife refuge, what various options or alternatives exist for creating a refuge, how lands might be acquired and managed, and what might be the results or effects of establishing a national wildlife refuge in the valley.

U.S. Representatives Paul Kanjorski (11th District of Pennsylvania) and Charles Dent (15th District) co-sponsored a bill (H.R. 5232) to study the valley for potential inclusion into the National Wildlife Refuge System, which was successfully passed as the Cherry Valley National Wildlife Refuge Study Act of 2006 as Title VI of H.R. 4957 (Public Law No.: 109-363). This act requires the Secretary of the Department of the Interior to submit a report containing the results of the study to the Committee on Resources, U.S. House of Representatives, and to the Committee on Environment and Public Works, U.S. Senate. Proposing the creation of a new refuge is a federal action subject to NEPA, which requires that all federal agencies proposing an action consider the environmental effects of the action, and that alternatives to the proposed federal action be considered. This draft Study Report was developed in concert with relevant laws and policies of the Service and the National Wildlife Refuge System, along with existing fish and wildlife conservation plans that might be influenced by a refuge in the valley. This draft Study Report also considers the suggestions, comments, and issues raised during public meetings held on the potential refuge in March 2008.

This study offers proposed refuge purposes, vision, and goals (Chapter 1 – Study Purpose and Planning Considerations). It also presents a detailed description of the physical, biological, and socioeconomic environment within which the study takes place, thus defining the area that may be affected by a refuge (Chapter 2 – Affected Environment). Most important, the study proposes the creation of a refuge, which is believed by the Service to be the best alternative for fulfilling the intent of the Study Act, and the proposed refuge purposes, vision, and goals (Chapter 3 –Alternatives). In addition to the proposed refuge, two other alternatives are offered. Environmental impacts, including to the physical environment, biological resources, and the socio-economic environment in Cherry Valley are also evaluated (Chapter 4 – Environmental Consequences).

The proposed refuge purposes, vision, and goals are first presented in Chapter 1. Purposes establish the legal foundation for a refuge. A vision offers a description of the desired future conditions envisioned for a refuge. Goals are broad statements of management intent. Ultimately, goals drive management action. The proposed goals for a Cherry Valley National Wildlife Refuge are:

> Goal 1. Protect and enhance habitats for federal trust species and species of management concern, emphasizing migratory birds and species listed under the federal Endangered Species Act, along with protection of wetlands and Kittatinny Ridge habitats.
>
> Goal 2. Create opportunities for hunting, fishing, wildlife observation and photography, and environmental education and interpretation, while promoting activities that complement the purposes of the refuge and other protected lands in the region.

Goal 3 Promote science, education, and research through partnerships to inform land management decisions and encourage continued responsible stewardship of the natural resources of Cherry Valley.

The Cherry Valley Study Act Boundary, comprised of approximately 30,000 acres in southeastern Monroe County, Pennsylvania, harbors several nationally-rare ecosystems, several federally-listed, endangered or threatened species, and over 30 plant and animal species considered by the Commonwealth of Pennsylvania as species of conservation concern (Chapter 2. Affected Environment). A diverse mosaic of habitats, including extensive forests along the Kittatinny Ridge, wetlands along Cherry Creek, and pastures scattered throughout the valley, have helped to sustain diverse wildlife populations within a two hour drive of more than 20 million people. Among the outstanding conservation priorities in the valley is one of the largest known collections of bog turtle populations, important foraging habitats for every raptor species that migrates along Kittatinny Ridge, and globally rare calcareous fen habitats.

The three alternatives considered are:

Alternative A. -- *"*No Refuge*"* -- This is the No Action alternative required by NEPA and serves as a baseline to which other alternatives are compared. In this alternative, there would be no new refuge and no designated acquisition boundary. Habitat protection and management would continue to be done by existing organizations and government programs. Currently there are 6,313 acres of lands protected by agricultural easements, private conservation organizations, and municipal, state, and federal ownerships within Cherry Valley. Of these, 4,811 acres contain 12 of the defined Cherry Valley ecosystems. There would be no new opportunities for refuge-based, wildlife-dependent public uses, partnerships, or scientific research.

Alternative B -- "Diverse Habitat Complex" -- This is the Service's <u>proposed action</u>. It proposes an acquisition boundary to include up to 20,466 acres containing portions of 13 of the valley and ridge's defined ecosystems. Protection of lands would be accomplished through fee title (about 50 percent of the acres) and conservation easements (about 50 percent of the acres). This alternative would provide protection for more extensive habitat areas than the other alternatives, and would better enable the Service to meet the needs of both rare and more common species of wildlife. It would offer more substantial opportunities for compatible public uses than either Alternative A or C, and would also enable refuge-based partnerships and scientific research.

Alternative C --"Wetlands and Ridge Forests" -- This alternative proposes an acquisition boundary of up to 14,124 acres containing portions of 12 of the valley and ridge's defined ecosystems. Protection of lands would be done through fee title (about 65 percent of the acres) and conservation easements (about 35

percent of the acres). It would offer opportunities for wildlife management, compatible public uses, along with new refuge-based partnerships and scientific research, although these opportunities would be less than those for Alternative B.

Environmental effects of creating a refuge (Chapter 4) in the valley are described for each of the three alternatives. Environmental effects are described in broad categories – physical (air, water, soil, and sound), biological (habitats and species), and socioeconomic (public use, land use, tax revenue, and cultural and historic resources), providing essential background information for assessing potential effects on that environment due to the establishment of a refuge in the valley. Providing a comparison of potential effects due to each alternative provides the Service and the public with important information about what may be the best way to protect valuable wildlife resources within Cherry Valley, yet remain sensitive and knowledgeable about how those land protection measures, and subsequent management activities, may affect the valley. Generally, we concluded that the environmental effects of establishing a refuge in Cherry Valley would be positive for all of the physical, biological, and socioeconomic aspects noted above, although we recognize that refuge management activities and public use activities could have some negative effects on the valley habitats. The effects of not creating a refuge could exacerbate negative effects that already exist because of expanding changes in land use with associated impacts to air and water quality, noise levels, displacement of valuable habitats, and lost opportunities for wildlife-dependent recreational opportunities (e.g., hunting and fishing).

The Study Report also presents a draft Conceptual Management Plan, a draft Land Protection Plan, and a draft Realty Feasibility Study in the appendices. The draft Conceptual Management Plan provides general, interim management direction for the proposed new refuge. It identifies proposed purposes, interim goals, management objectives, and potential staffing structure for a refuge. It also addresses any pre-existing, compatible, and wildlife-dependent recreational uses that we would allow to continue (on an interim basis) on any land acquired for a refuge. The purposes of the draft Land Protection Plan are to provide landowners and the public with an outline of Service policies, priorities, and protection methods for land in the proposed refuge area, assist landowners in determining whether their property lies within the proposed refuge boundary, and inform landowners about our long-standing policy of acquiring land only from willing sellers. The draft Realty Feasibility Study provides a broad estimate of the cost to acquire all lands, waters, and interests that have been deemed appropriate for refuge status under the proposed action, recognizing that land protection occurs over fairly long periods of time and that not all lands within an approved refuge acquisition boundary are suitable for wildlife conservation.

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Introduction

The United States National Wildlife Refuge System is the world's largest collection of lands and waters set aside specifically for conserving wildlife and protecting ecosystems. Currently, 548 national wildlife refuges encompassing over 95 million acres are part of the national network. Refuges are found in every state and several island territories. Each year, more than 40 million visitors hunt, fish, observe and photograph wildlife, or participate in environmental education or interpretation activities on refuges. Currently, there are two refuges in Pennsylvania, the Erie National Wildlife Refuge in the extreme northwest part of the State and the John Heinz National Wildlife Refuge just outside Philadelphia along the Delaware River. Detailed information about the National Wildlife Refuge System can be found on the U.S. Fish and Wildlife Service's website (http://www.fws.gov/refuges/).

John Heinz National Wildlife Refuge

This document assesses the feasibility of and proposes creating a new refuge in Cherry Valley, Pennsylvania. It was prompted by the Cherry Valley National Wildlife Refuge Study Act of 2006 (Title VI in Public Law No: 109-363, see also Appendix A) and prepared by National Wildlife Refuge System staff, Northeast Region, U.S. Fish and Wildlife Service, Department of the Interior, with assistance from numerous other agencies, organizations, and individuals.

Our consideration of a refuge within Cherry Valley is largely based on its wildlife and natural habitat resource values. Cherry Valley lies within the Delaware River watershed and is contained within the Ridge-and-Valley geologic province of the Appalachian Mountains. Cherry Valley is located primarily in Monroe County, with a narrow section running atop the Kittatinny Ridge in Northampton County, Pennsylvania. It lies along the eastern border of Pennsylvania nearly equally distant from Philadelphia and New York City and is valued for its rural landscape, recreational opportunities, and its wildlife resources. Cherry Valley encompasses land in the townships of Ross, Chestnuthill, Hamilton, Stroud, Smithfield, and Delaware Water Gap Borough. The valley currently supports, or has supported in the past, several nationally-rare ecosystems, five federally-listed, threatened or endangered species, many migratory birds, and over 30 plant and animal species listed as threatened or endangered by the Commonwealth of Pennsylvania. It is recognized as one of the most unique and important areas for the federally-listed, threatened bog turtle (*Clemmys muhlenbergii),* migrating raptors, and inter-montane wetlands.

If creation of a national wildlife refuge is approved, a boundary line for the refuge would be established that authorizes the U.S. Fish and Wildlife Service to protect land within that boundary. An approved refuge acquisition boundary identifies the important and sensitive habitat areas that qualify for inclusion in the National Wildlife Refuge System and can be managed under the system's policies. Landowners within a refuge acquisition boundary are under no obligation to sell their property to the U.S. Fish and Wildlife Service. We would only acquire land from willing sellers, and can make offers to purchase land from or enter into management agreements with willing landowners within the approved boundary. The new refuge would officially be created upon acquisition of the first parcel of land within the acquisition boundary. Management of the new refuge would follow thereafter.

Land protection within the valley has been promoted by a variety of measures including a $25 million Monroe County open space bond initiative that has been exhausted due to land protection demand. These measures have been insufficient to protect the county's valuable wildlife habitats. Recognizing the valley's valuable wildlife habitat resources, residents, local elected officials, community leaders, and private conservation organizations within the community took action to encourage permanent protection of these areas within Cherry Valley as part of the National Wildlife Refuge System. Consequently, U.S. Representatives Paul Kanjorski (11th District of Pennsylvania) and Charles Dent (15th District) co-sponsored a bill (H.R. 5232) to study the valley for potential inclusion into the National Wildlife Refuge System. This bill was successfully passed as the Cherry Valley National Wildlife Refuge Study Act of 2006 as Title VI of H.R. 4957 (Appendix A).

This document fulfills Section 603 of this act, titled: "Study of Refuge Potential and Future Refuge Land Acquisition," and is presented as an Environmental Assessment under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.; Stat. 852), as amended (NEPA). This document also adheres to relevant federal directives and National Wildlife Refuge System policies. These policies, some of which are briefly described in Chapter 1, are designed to guide decisions consistent with the National Wildlife Refuge System's overriding legislation – The National Wildlife Refuge Administration Act of 1966 , as amended by the National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 668dd-668ee).

The document is divided into six chapters and several appendices:

Chapter 1 – Study Purpose and Planning Considerations. This chapter provides an overview and describes the purpose and need for preparing this document and the decision the Service is intending to make, while setting the stage for the subsequent chapters and appendices. It describes the mandate of the Cherry Valley National Wildlife Refuge Study Act of 2006, evaluating the potential for a National Wildlife Refuge in Cherry Valley, and describes National Wildlife Refuge System policies, and national and regional conservation plans or directives that influenced this report.

Chapter 1 also presents our proposed vision and goals for the proposed refuge, discusses possibilities for refuge administration, explains the planning process we followed in developing this report, and describes the key issues, concerns, and opportunities identified that influenced the study.

Chapter 2 – Affected Environment. This chapter describes the valley's physical environment, habitats and species, and human environment. It provides a thorough description of the valley and its current features so that the beneficial and adverse effects of the proposed refuge can be weighed within the larger context of the broader Cherry Valley region, the Delaware River watershed, and the Appalachian Ridge-and-Valley geologic province.

Chapter 3 – Description of Alternatives. This chapter presents three alternatives for establishing a refuge in Cherry Valley, including our proposed action (Alternative B). The represents a range of reasonable alternatives for establishing a refuge in Cherry Valley, and thus fulfilling one of the tenets of NEPA. The alternatives include:

- *Alternative A: No Refuge* -- This is the "No Action" alternative required by NEPA and serves as a baseline to which the other alternatives are compared.
- *Alternative B: Cherry Valley Diverse Habitat Complex* -- This is the Service's proposed action. It includes protection of up to 20,466 acres for a refuge.
- *Alternative C: Cherry Valley Wetlands and Ridge Forests Complex* -- This alternative proposes protection of up to 14,124 acres for a refuge.

Chapter 4 – Environmental Effects. This chapter evaluates possible environmental effects (beneficial and adverse) of implementing each of the alternatives so that the projected effects of establishing a refuge in the valley can be fully considered. Effects discussed cover the biological and physical environment, cultural features, and socio-economic considerations. Not only are effects discussed as beneficial or adverse, but also whether they are direct, indirect, cumulative, or unavoidable. Once effects are described, a determination can be made on whether creation of a new refuge would significantly affect the quality of the human environment, and whether there is any need to prepare an Environmental Impact Statement.

Chapter 5 – List of Preparers. This chapter documents writers and contributors to the Study Report.

Chapter 6 – Consultation and Coordination with Others. This chapter summarizes how the public and our partners were involved in the preparation of this document. Public involvement was a requirement of the act and is a key component of the NEPA process.

Appendices – Additional information relevant to this document is provided in the various appendices including a draft Conceptual Management Plan, a draft Land Protection Plan, a draft Realty Feasibility Study, and additional information on the economics analysis.