

Appendix D



USFWS

A view of the Wallkill River at one of its broader sections.

Wild and Scenic River Review

■ Introduction

■ Phase I—Wild and Scenic River Inventory

Introduction

The Wild and Scenic Rivers Act, (Pub. L. 90-543 as amended: 16 U.S.C. 1271-1287) (the act) established a method for providing federal protection for certain free-flowing rivers, preserving them and their immediate environments for the use and enjoyment of present and future generations. The function of this wild and scenic river review is to inventory and study the river, river segments and their immediate environments within the Wallkill River National Wildlife Refuge (refuge) acquisition boundary to determine if they merit inclusion in the National Wild and Scenic River System (NWSRS).

Section 5(d)(1) of the act states in part:

“In all planning for the use and development of water and related land resources, consideration shall be given by all federal agencies involved to potential national wild, scenic and recreational river areas, and all river basin and project plan reports submitted to the Congress shall consider and discuss any such potential. The Secretary of the Interior and the Secretary of Agriculture shall make specific studies and investigations to determine which additional wild, scenic and recreational river areas within the United States shall be evaluated in planning reports by all federal agencies as potential alternative uses of the water and related land resources involved.”

Wild and scenic river considerations are a required element of comprehensive conservation plans and conducted in accordance with the refuge planning process outlined in 602 FW 1 and 3, including public involvement and National Environmental Policy Act compliance.

As part of the review process in section 5(d)(1), we are required to include all river segments that are within the planning area and listed in the Nationwide Rivers Inventory (NRI). The NRI is maintained by the National Park Service (NPS), and lists more than 3,400 free-flowing river segments in the United States that are believed to possess one or more “outstandingly remarkable” natural or cultural values judged to be of more than local or regional significance. The NRI lists a 14-mile reach of the Wallkill River from Hamburg, New Jersey, to Merritts Island, New York. A 9-mile portion of the Wallkill River from the southern refuge boundary downstream to the northern refuge boundary portion is within the 14-mile reach in the NRI, and is included in this Wild and Scenic River Review.

When a river or river segment is determined to be potentially eligible through the Wild and Scenic River Inventory process, its eligibility status is forwarded to the National Park Service for inclusion in the NRI. The results of this inventory will be forwarded to NPS for inclusion in the NRI.

The wild and scenic river review process has three phases: inventory, study and recommendation. In the inventory phase, we determine if any of the river or river segments within the planning area are eligible for NWSRS designation. We then determine the potential classification of eligible river segments as wild, scenic, or recreational (table D.1). To be eligible for wild and scenic river designation, a river or river segment is required to be free flowing and possess at least one outstanding remarkable value (ORV). The act identifies an ORV as recreational, geologic, fish, wildlife, historic, cultural, or other similar value. The river eligibility and classifications assigned during this inventory stage are tentative, and would be subject to further consideration during the study phase. Final determinations would be incorporated into the Comprehensive River Management Plan for any river/river segment receiving eventual designation as a component of the NWSRS.

In the study phase, we conduct a suitability study to determine if the river or river segments that were found eligible are suitable for designation to the NWSRS. The Act identifies the factors that will be considered and documented in determining the suitability of a river or river segment for inclusion in the NWSRS. Section 4(a) of the Act states that the study will include:

“maps and illustrations, ...; the characteristics which do or do not make the area a worthy addition to the system; the current status of landownership and use in the area; the reasonably foreseeable potential uses of the land and water which would be enhanced, foreclosed, or curtailed if the area were included in the national wild and scenic rivers system; the federal agency ... by which it is proposed the area, should it be added to the system, be administered; the extent to which it is proposed that such administration, including the costs thereof, be shared by state and local agencies; and the estimated cost to the United States of acquiring necessary lands and interests in land and of administering the area, should it be added to the system....”

The study area covers each river or river segment and its immediate environment. The immediate environment is an area extending the length of the river or river segment being studied and extending in width one-quarter mile from each bank of the river.

The recommendation phase consists of forwarding the wild and scenic river study report from the Director through the Secretary and the President to Congress. The report is prepared after the record of decision for the final CCP has been signed. The river or river segments recommended for NWSRS designation are managed to maintain their character in accordance with management goals, objectives, and strategies outlined in the final CCP until Congress makes a favorable legislative determination or the CCP is amended to modify or remove the wild and scenic river proposal.

This review is limited to the inventory phase only. Due to previous personnel commitments, neither the Service nor the affected states or partners were prepared to provide the appropriate involvement that would be needed to move the results of the inventory phase of this review to the study and recommendation phases. The Interdisciplinary Study Team (IDT) decided that it would be appropriate to inventory only those rivers and river segments that flow within the boundaries of the Wallkill River refuge, because the portion of the river within the boundary is a small segment of the entire river, and there is no break in their character at the refuge boundary. We believe that the rivers that we inventoried in this review should all be studied in total and with the full participation and involvement of our federal, state, local and nongovernmental partners.

❖ **The Interdisciplinary Study Team**

The Interdisciplinary Study Team, composed of local, state and federal partners, met at the refuge on February 27, 2007 to determine if any of the river or river segments within the planning area were eligible for NWSRS designation and tentatively classify each eligible river or river segment as wild, scenic, or recreational. That process required combining site knowledge with existing land status maps, photographs, and available information on land use to determine if any of the refuge riverine systems were eligible for NWSRS designation. Public and stakeholder involvement provided additional information on the planning area's river resource values, and guidance on alternative river conservation and management approaches. The river eligibility and classifications that we assigned during the inventory phase are tentative.

The IDT members are listed below.

Edward Henry, Refuge Manager, Wallkill River NWR, Sussex, New Jersey
Beth Goldstein, Planning Team Leader, USFWS
Rich Osborn, Green Acres, New Jersey Department of Environmental Protection
Nathanial Sajdak, Wallkill River Watershed Management Group
Donna T aylor, Sussex County Farmland Preservation and Conservation

Phase I—Wild and Scenic River Inventory

❖ **Introduction**

The function of the wild and scenic river inventory is to identify rivers or segments of rivers and their immediate environment within the planning area that meet the minimum criteria for wild and scenic river eligibility under the Act. The wild and scenic river inventory area considers all river or river segments within

the planning area and their immediate environments. The immediate environment is the area extending the length of the river or river segment being studied and extending in width of one-quarter mile from each bank of the river. The immediate environment is not to exceed 320 acres per river mile. Those rivers or river segments that meet the minimum eligibility criteria are tentatively classified as wild, scenic, or recreational.

❖ **Minimum Wild and Scenic River Criteria**

To be eligible for designation as a wild and scenic river, a river or river segment and its immediate environment is required to possess at least one ORV and be free flowing.

❖ **Outstanding Remarkable Values**

Section 1(b) of the Act identifies the ORVs in the following manner:

“It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.”

The following ORV definitions were taken from the December 1999 joint U.S. Forest Service and National Park Service technical report titled “The Wild and Scenic River Study Process.” That technical report was prepared for the interagency Wild and Scenic Rivers Coordinating Council. As stated in the report:

The following eligibility criteria are offered to foster greater consistency within the federal river-administering agencies. They are intended to set minimum thresholds to establish ORVs and are illustrative but not all-inclusive. If utilized in an agency’s planning process, these criteria may be modified to make them more meaningful in the area of comparison, and additional criteria may be included.

Scenery: *The landscape elements of landform, vegetation, water, color and related factors result in notable or exemplary visual features and/or attractions. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.*

Recreation: *Recreational opportunities are, or have the potential to be, popular enough to attract visitors from throughout or beyond the region of comparison or are unique or rare within the region.*

- *Interpretive opportunities may be exceptional and attract, or have the potential to attract, visitors from outside the region of comparison.*
- *The river may provide, or have the potential to provide, settings for national or regional usage or competitive events.*

Geology: *The river or the area within the river corridor contains one or more example of a geologic feature, process or phenomenon that is unique or rare within the region of comparison.*

Fish: *Fish values may be judged on the relative merits of fish populations, habitat, or a combination of these river-related conditions.*

- **Populations:** *The river is nationally or regionally an important producer of resident and/or anadromous fish species. Of particular significance is the presence of wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of “outstandingly remarkable.”*

- **Habitat:** *The river provides exceptionally high quality habitat for fish species indigenous to the region of comparison. Of particular significance is habitat for wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of habitats is an important consideration and could, in itself, lead to a determination of “outstandingly remarkable.”*

Wildlife: *Wildlife values may be judged on the relative merits of either terrestrial or aquatic wildlife populations or habitat or a combination of these conditions.*

- **Populations:** *The river, or area within the river corridor, contains nationally or regionally important populations of indigenous wildlife species. Of particular significance are species considered to be unique, and/or populations of federal or state listed (or candidate) threatened endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of “outstandingly remarkable.”*
- **Habitat:** *The river, or area within the river corridor, provides exceptionally high quality habitat for wildlife of national or regional significance, and/or may provide unique habitat or a critical link in habitat conditions for federal or state listed (or candidate) threatened, endangered or sensitive species. Contiguous habitat conditions are such that the biological needs of the species are met. Diversity of habitats is an important consideration and could, in itself, lead to a determination of “outstandingly remarkable.”*

Prehistory: *The river, or area within the river corridor, contains a site(s) where there is evidence of occupation or use by Native Americans. Sites must have unique or rare characteristics or exceptional human interest value(s). Sites may have national or regional importance for interpreting prehistory; may be rare and represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; and/or may have been used by cultural groups for rare sacred purposes. Many such sites are listed on the National Register of Historic Places, which is administered by the NPS.*

History: *The river or area within the river corridor contains a site(s) or feature(s) associated with a significant event, an important person, or a cultural activity of the past that was rare or one-of-a-kind in the region. Many such sites are listed on the National Register of Historic Places. A historic site(s) and/or feature(s) is 50 years old or older in most cases.*

Other Values: *While no specific national evaluation guidelines have been developed for the “other similar values” category, assessments of additional river-related values consistent with the foregoing guidance may be developed — including, but not limited to, hydrology, paleontology and botany resources.*

❖ Wild and Scenic River Classification

Section 2(b) of the Act defines the classifications of Wild and Scenic Rivers in the following manner:

Every wild, scenic or recreational river in its free-flowing condition, or upon restoration to this condition, shall be considered eligible for inclusion in the National Wild and Scenic Rivers System and, if included, shall be classified, designated, and administered as one of the following:

- 1) **Wild river areas** — *Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.*
- 2) **Scenic river areas** — *Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.*

3) **Recreational river areas** — *Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.*

❖ **Summary of the Wild and Scenic River Inventory Findings**

The refuge encompasses approximately 9 miles of the Wallkill River. The 9-mile portion of the Wallkill River was considered for wild and scenic river eligibility during the inventory. For inventory purposes, the IDT evaluated the segment of the Wallkill River that lays within the refuge's currently approved acquisition boundary. The IDT members determined that the segment met the criteria for wild and scenic river eligibility. The river segment and its immediate environment were determined to be free flowing and possess at least one ORV. A description of each eligible river segment, its immediate environment, and the IDT inventory findings are summarized below. The IDT inventory findings are summarized in table D.2.

River Segment: Wallkill River (south refuge boundary downstream to the north boundary)

River Segment Length: 9 miles

Outstandingly Remarkable Values: Scenic, Recreation, Geology, Wildlife, Fish.

Tentative Classification: Scenic

The Wallkill River originates at the outlet of Lake Mohawk in Sparta Township. The river flows north through Sussex County, N.J. until it crosses into New York State, where it joins Rondout Creek near Rosendale, N.Y., and empties into the Hudson River at Kingston, N.Y. The Wallkill River is one of the few rivers in North America that flows north, and is free flowing throughout most of its length.

The Wallkill River National Wildlife Refuge is a riverine floodplain refuge, located within in the Kittatinny Valley in the north central portion of the Wallkill River watershed. The refuge encompasses approximately 9 miles of the Wallkill River. The refuge bottomlands provide one of the few large areas of high quality waterfowl habitat remaining in northwest New Jersey.

As the river passes through the refuge, the river's broad floodplains consist primarily of forested wetlands and wet meadows. The rolling topography of the area consists of oak-covered limestone ridges that parallel the river. At certain locations along the river, the limestone ridges come right to the river's edge. Wetlands and forests yield to open farmlands and grasslands at the higher elevations. The shoreline of the river consists of a variety of habitats, including red maple swamps, calcareous fens, wet meadows and old fields.

The Wallkill River bottomland is one of the few large high quality waterfowl habitats remaining in northwestern New Jersey. As a major watershed and wetland complex, the river provides migratory and nesting habitat for Atlantic Flyway black duck populations as well as wood duck, mallard, green-winged teal, common merganser, and Canada geese. More than 225 species of birds have been recorded on the refuge. Of those, 122 have been documented as breeding on the refuge. The refuge provides valuable habitat to migrant waterfowl, wintering raptors, grassland birds, and marsh birds. The refuge is also an important site for wading birds, shorebirds, shrubland-dependant birds, and forest interior songbirds. Great blue heron and green herons are perennial summer inhabitants in the refuge wetlands. The refuge also supports 19 species listed by the State of New Jersey as threatened or endangered.

Raptors are plentiful during fall migration as well, when sharp-shinned hawks, Cooper's hawks, and broad-winged hawks fill the sky on clear September days. Short-eared owls, northern harriers, and rough-legged hawks are found primarily during the winter.

Approximately 40 species of mammals inhabit the refuge. Important game and furbearer species include the opossum, raccoon, striped skunk, river otter, mink, red fox, gray fox, coyote, muskrat, beaver, eastern cottontail, and white-tail deer.

The refuge is regionally important for providing habitat for bobcat and black bear. Those large mammals require the large, unfragmented habitat types found on the refuge.

Butterflies and dragonflies are abundant along the river. The refuge supports one of the most diverse Odonate communities in the Northeast. The most significant of these include the first state occurrences of midland clubtail (*Gomphus fraternus*) and skillet clubtail (*G. ventricosus*).

The Wallkill River provides an excellent warm water fishery for largemouth bass, pickerel, perch, sunfish, and bullhead. Several of the streams that enter the river have native brook trout populations. The stocking of brown trout by the state stops near Hamburg, N. J., where the river bottom changes from primarily gravelly to silt-laden.

Recreational opportunities for fishing, hunting, hiking, and wildlife observation and photography are abundant. A segment of the Appalachian Trail runs through the refuge. The refuge has three nature trails. Fishing and canoe access is provided at the Wallkill River on Route 565 in Vernon Township. No parking is currently available at this site, but parking is available at the corner of Route 565 and Scenic Lakes Road, a 5-minute walk from the river.

❖ Protective Management

When a river segment is determined to be eligible and given a preliminary classification, the outstandingly remarkable values shall be afforded adequate protection, subject to valid existing rights, and until the eligibility determination is superseded. Management activities and authorized uses shall not be allowed to adversely affect either the eligibility, or the tentative classification from a wild area to a scenic area or a scenic area to a recreational river area.

Public notification of the protective management will occur no later than the publication and release of this Comprehensive Conservation Plan. However, the Refuge Manager shall initiate protective management as soon as the eligibility is determined.

Specific management prescriptions for eligible river segments should provide protection in the following ways:

1. **Free-Flowing Values:** The free-flowing characteristics of the eligible river segments cannot be modified to allow stream impoundments, diversions, channelization and/or riprapping to the extent the Service is authorized under law.
2. **River Related Values:** Each segment shall be managed to protect identified outstandingly remarkable values and, to the extent practicable, such values shall be enhanced.
3. **Classification Impacts:** Management and development of the eligible river and its corridor cannot be modified, subject to valid existing rights, to the degree that its eligibility or tentative classification would be affected

Table D.1. Classification Criteria for Wild, Scenic and Recreational River Area¹.

<i>Wild</i>	<i>Scenic</i>	<i>Recreational</i>
Water Resources Development		
Free of impoundment.	Free of impoundment.	Some existing impoundment or diversion. The existence of low dams, diversions, or other modifications of the waterway is acceptable, provided the waterway remains generally natural and riverine in appearance.
Shoreline Development		
Essentially primitive. Little or no evidence of human activity.	Largely primitive and undeveloped. No substantial evidence of human activity.	Some development. Substantial evidence of human activity.
The presence of a few inconspicuous structures, particularly those of historic or cultural value, is acceptable.	The presence of small communities or dispersed dwellings or farm structures is acceptable.	The presence of extensive residential development and a few commercial structures is acceptable.
A limited amount of domestic livestock grazing or hay production is acceptable. Little or no evidence of past timber harvest. No ongoing timber harvest.	The presence of grazing, hay production, or row crops is acceptable. Evidence of past or ongoing timber harvest is acceptable, provided the forest appears natural from the riverbank	Lands may have been developed for the full range of agricultural and forestry uses. May show evidence of past and ongoing timber harvest.
Accessibility		
Generally inaccessible except by trail.	Accessible in places by road.	Readily accessible by road or railroad.
No roads, railroads or other provision for vehicular travel within the river area. A few existing roads leading to the boundary of the river area is acceptable.	Roads may occasionally reach or bridge the river. The existence of short stretches of conspicuous or longer stretches of inconspicuous roads or rail-roads is acceptable.	The existence of parallel roads or railroads on one or both banks as well as bridge crossings and other river access points is acceptable.
Water Quality		
Meets or exceeds federal criteria or federally approved state standards for aesthetics, for propagation of fish and wildlife normally adapted to the habitat of the river, and for primary contact recreation (swimming), except where exceeded by natural conditions.	No criteria prescribed by the Act. The Federal Water Pollution Control Act Amendments of 1972 have made it a national goal that all waters of the United States be made fishable and swimmable. Therefore, rivers will not be precluded from scenic or recreational classification because of poor water quality at the time of their study, provided a water quality improvement plan exists or is being developed in compliance with applicable federal and state laws.	

¹ Table D.1 taken from: Diedrich, J., Thomas C. 1999. The Wild & Scenic River Study Process. U.S. Forest Service and National Park Service.

Table D.2. Eligible Rivers within the Wallkill River National Wildlife Refuge.												
River Name	River Segment Description	Outstandingly Remarkable Values							Tentative Classification			FWS River Segment Length (Miles)*
		Scenery	Recreation	Geology	Fish	Wildlife	Cultural	Other Values	Wild	Scenic	Recreational	
Wallkill River	South refuge boundary to the North refuge Boundary	X	X	X	X	X				X		9.0

*Segment length is approximate.