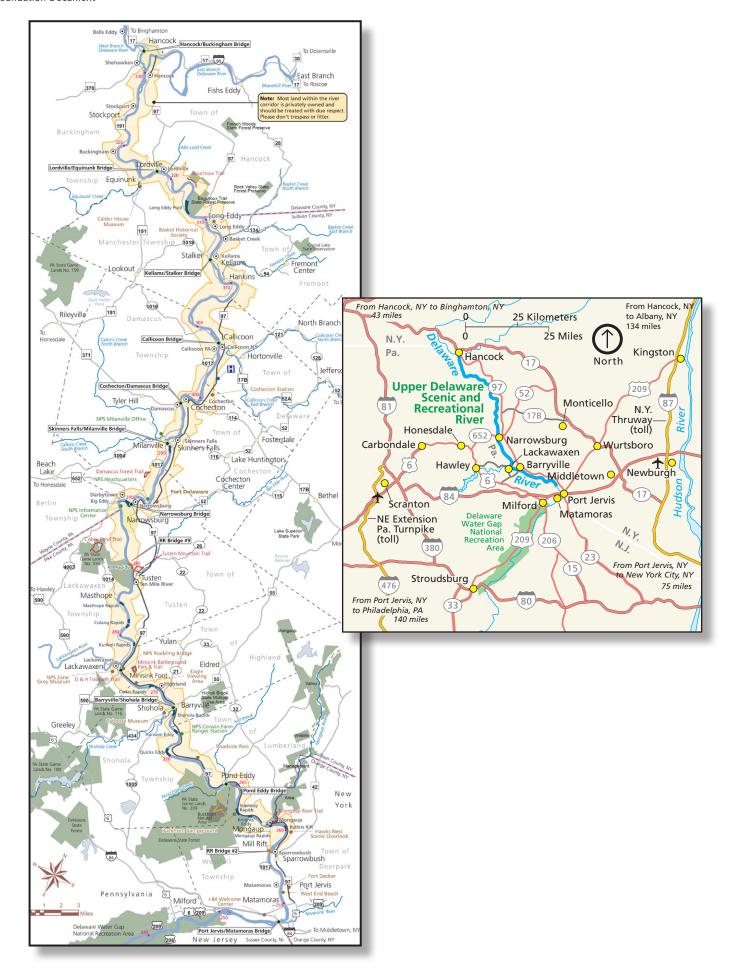


Foundation Document Upper Delaware Scenic and Recreational River

New York, Pennsylvania

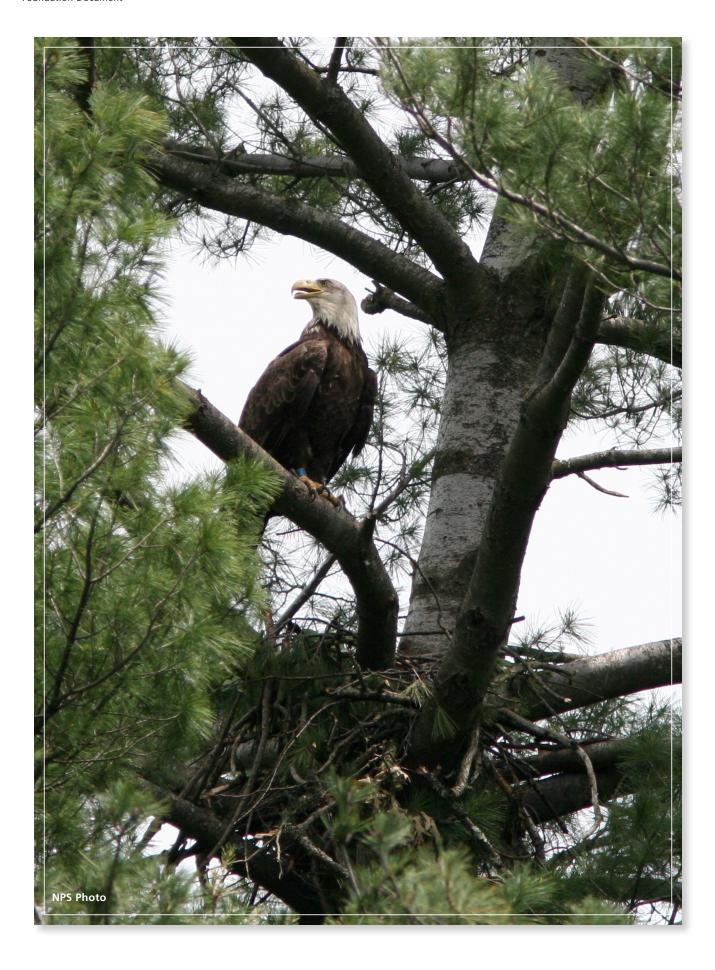
February 2014





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Mission of the National Park Service

The National Park Service (NPS) preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The NPS cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

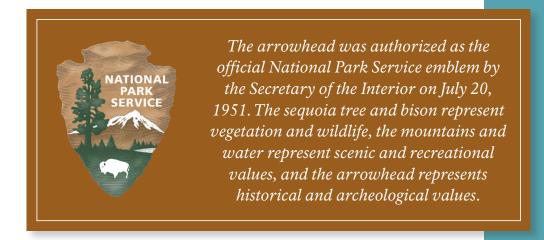
The NPS core values are a framework in which the NPS accomplishes its mission. They express the manner in which, both individually and collectively, the NPS pursues its mission. The NPS core values are:

- Shared stewardship: We share a commitment to resource stewardship with the global preservation community.
- Excellence: We strive continually to learn and improve so that we may achieve the highest ideals of public service.
- Integrity: We deal honestly and fairly with the public and one another.
- Tradition: We are proud of it; we learn from it; we are not bound by it.
- Respect: We embrace each other's differences so that we may enrich the well-being of everyone.

The NPS is a bureau within the Department of the Interior. While numerous national park system units were created prior to 1916, it was not until August 25, 1916, that President Woodrow Wilson signed the National Park Service Organic Act formally establishing the National Park Service.

The national park system continues to grow and comprises 401 NPS units covering more than 84 million acres in every state, the District of Columbia, American Samoa, Guam, Puerto Rico, and the Virgin Islands. These units include, but are not limited to, national parks, monuments, battlefields, military parks, historical parks, historic sites, lakeshores, wild and scenic rivers, seashores, recreation areas, scenic rivers and trails, and the White House. The variety and diversity of NPS units throughout the nation require a strong commitment to resource stewardship and management in order to ensure both the protection and enjoyment of these resources for future generations.

Within this document, the terms "Upper Delaware Scenic and Recreational River," "park unit," and "unit" are used to refer to the NPS management entity. The term "river corridor" refers to all land and waters, both public and private, that fall within the designated boundary of the management entity.



Introduction

Every unit of the national park system is to have a foundation document that will provide basic guidance for planning and management decisions. The core components of a foundation document include a brief description of the NPS unit as well as the unit's purpose, significance, fundamental resources and values, and interpretive themes. The foundation document also includes special mandates and administrative commitments, an assessment of planning and data needs that identifies planning issues, planning products to be developed, and the associated studies and data required for planning. Along with the core components, the assessment provides a focus for NPS unit planning activities and establishes a baseline from which planning documents are developed.

A primary benefit of developing a foundation document is the opportunity to integrate and coordinate all kinds and levels of planning from a single, shared understanding of what is most important about the unit. The process of developing a foundation document begins with gathering and integrating information about the unit. Next, this information is refined and focused to determine what the most important attributes of the unit are. The process of preparing a foundation document aids unit managers, staff, and the public in identifying and clearly stating in one document the essential information that is necessary for management to consider when determining future planning efforts, outlining key planning issues, and protecting resources and values that are integral to unit purpose and identity.

While not included in this document, an NPS unit atlas is also part of a foundation project. The atlas is a series of maps compiled from available geographic information system (GIS) data on natural and cultural resources, visitor use patterns, facilities, and other topics. It serves as a GIS-based support tool for planning and unit operations. The atlas is published as a geospatial data for use in a web mapping environment. The atlas for Upper Delaware Scenic and Recreational River can be accessed online at: http://insideparkatlas.nps.gov



Part 1: Core Components

The core components of a foundation document include a brief description of the unit, a purpose statement, significance statements, fundamental resources and values, and interpretive themes. These components are core because they typically do not change over time. Core components are expected to be used in future planning and management efforts.

Brief Description of the Upper Delaware Scenic and Recreational River

Despite the proximity of the Upper Delaware River to major urban centers in the Northeast, the area possesses outstanding natural and cultural resources. To acknowledge this, Congress, in 1978, designated 73.4 miles of the Upper Delaware River as part of the

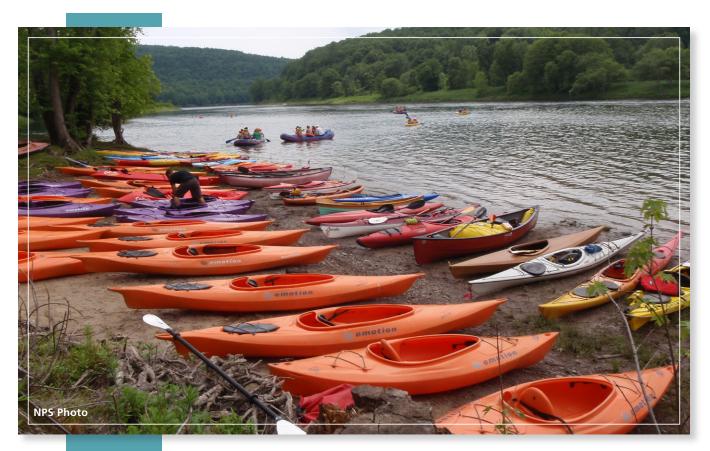
National Wild and Scenic Rivers System and as a unit of the national park system. The designation covers the river segment beginning at the confluence of the east and west branches of the Delaware River at Hancock, New York, and extends downstream to Railroad Bridge No.2, in the vicinity of Mill Rift, Pennsylvania. The Wild and Scenic Rivers Act states that the river must be protected in its free-flowing condition and that it must be managed for the benefit and enjoyment of present and future generations.

Upper Delaware Scenic and Recreational River is the dividing boundary between Pennsylvania and New York along portions of 5 counties and 15 towns/townships. The Delaware River is the longest and one of the cleanest rivers in the eastern United States that remains undammed the length of its main stem. The NPS unit is a working partnership dedicated to preserving the "outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural ... and other similar resource values that qualified Upper Delaware for inclusion in the National Wild and Scenic Rivers System." (Upper Delaware Act P.L. 95-625 November 10, 1978)

The NPS owns only 30.4 acres of the just over 55,575 acres of land within the river corridor for which the agency has management responsibility under the enabling legislation. NPS-owned lands include the historic



Roebling's Delaware Aqueduct and portions of the Delaware and Hudson (D&H) Canal, a historic toll house, Zane Grey Museum, and Corwin Farm, as well as administrative structures. The remaining predominantly privately owned land is managed in accordance with the Land and Water Use Guidelines (Guidelines) set forth in the 1986 Final River Management Plan for the Upper Delaware Scenic and Recreational River (River Management Plan), as required by the enabling legislation, which describes ways that existing local and state laws and authorities will be used to safeguard the Upper Delaware's resources.



The Upper Delaware Council, a nonprofit organization whose membership consists of the 15 municipalities, 2 states, the Delaware River Basin Commission (DRBC), and the NPS (as a nonvoting member), is charged with responsibility for implementing the River Management Plan and assuring substantial conformance with the Land and Water Use Guidelines. The NPS partners with the Upper Delaware Council, as well as local, county, state, and federal partners, and other community organizations with an interest in the river corridor, through technical assistance and collaboration.

The least developed section of the last major river on the east coast that is undammed the length of its mainstem, the Upper Delaware has extraordinary ecological integrity and excellent water quality and provides outstanding habitat for aquatic, riparian, and adjacent terrestrial life. The free-flowing condition of the main stem of the Upper Delaware River maintains connectivity to and from the Atlantic Ocean that is essential for sea-run migratory species such as the American shad and American eel.

The Upper Delaware River is known for its outstanding recreational opportunities. These opportunities include river-specific activities such as fishing, boating, canoeing, kayaking, tubing, rafting, swimming, SCUBA diving, snorkeling, and hunting waterfowl. Other recreational activities include hiking, cross-country skiing, bicycling, touring, wildlife viewing, birdwatching, picnicking, hunting, and photography. Visitors are reminded that the majority of the property surrounding the Upper Delaware is privately owned and strongly encouraged not to trespass, to minimize impacts on resources, and to recreate safely. The NPS staff and partnering organizations proactively advise visitors of the dangers associated with river-related recreational activities including drowning, hypothermia, and other hazards.

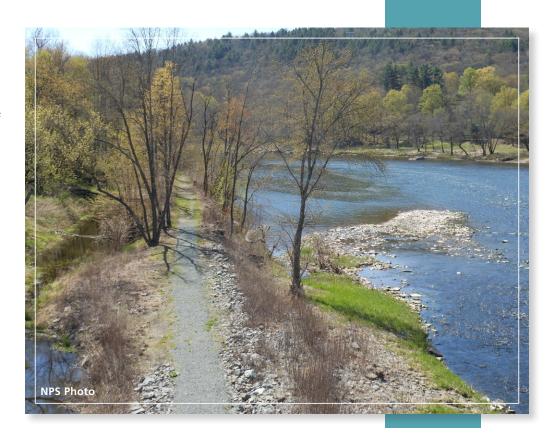
Visitors are afforded spectacularly scenic driving experiences along the state-designated Upper Delaware Scenic Byway (New York State Route 97), which largely parallels the river from Hancock to Port Jervis, New York, and provides visitors with several river access points. The byway threads through historic communities and along gentle rolling hills with views of the river gorge, forests, and agricultural lands. In particular, the winding Hawk's Nest section of the byway offers impressive panoramic vistas from river bluffs hundreds of feet high, with photo opportunities at motorist pull-offs. The byway also provides linkages to Jensens Ledges and Tusten Mountain, among several other sites, that provide visitors with views and vantage points to absorb the high-quality scenery that surrounds them.

There are currently 13 public river accesses, located on both Pennsylvania and New York shorelines. These accesses range from 3 to 20 miles apart along the river and are jointly managed by the NPS and the agencies that own the land. In addition, some private boat liveries—which rent canoes, rafts, tubes, and kayaks—have their own river access points. NPS Law Enforcement Rangers enforce federal regulations on the river and on lands owned, leased, or formally co-managed with other agencies.

The NPS preserves, maintains, and manages the use of Roebling's Delaware Aqueduct, the oldest existing wire cable suspension bridge in the United States. John A. Roebling, who later designed the Brooklyn Bridge, built the 1848 aqueduct that once carried the Delaware and Hudson Canal over the Delaware River. In the 1980s the aqueduct underwent adaptive reuse restoration as a one-lane bridge. The aqueduct, listed as both a national historic landmark and a national historic civil engineering landmark, was honored by the American Institute of Architects in 1989 for its rehabilitation design. Portions of the Delaware and Hudson Canal, a national historic landmark, are located in the river corridor.

Also among the sites managed by the NPS along the Upper Delaware is the home where the prolific author, Zane Grey, wrote his best-selling *Riders of the Purple Sage*, among other early works. The Zane Grey House, in Lackawaxen, Pennsylvania, is now a museum filled with memorabilia from Grey's successful career as an American novelist, as well as from his other endeavors in dentistry, baseball, world traveling, and fishing.

Overall, the Upper Delaware Scenic and Recreational River supports biodiversity and a healthy ecosystem while also offering both tranquility and adventure for visitors.



Purpose Statement

The Upper Delaware Scenic and Recreational River was established by Congressional designation on November 10, 1978 (see appendix B for enabling legislation and subsequent amendments). The following purpose statement was drafted after careful analysis of the enabling legislation and legislative history that influenced its development and lays the foundation for understanding what is most important about this NPS unit.

The Upper Delaware Scenic and Recreational River protects, conserves, and enhances the free-flowing character, exceptionally high water quality, and the scenic, recreational, ecological, cultural, and geological values of the Upper Delaware River valley through collaborative partnerships and cooperation with state and local government entities.



Significance Statements

Significance statements express why an NPS unit's resources and values are important enough to merit designation as a unit of the national park system. These statements are linked to the purpose of Upper Delaware Scenic and Recreational River, and are supported by data, research, and consensus. Statements of significance describe the distinctive nature of the Upper Delaware Scenic and Recreational River and why the area is important within a global, national, regional, and systemwide context. They focus on the most important resources and values that will assist in unit planning and management.

The following significance statements have been identified for Upper Delaware Scenic and Recreational River. (Please note that the sequence of the statements does not reflect the level of significance.)

- The main stem of the Delaware River, which includes the 73.4-mile-long Upper Delaware Scenic and Recreational River (as well as two other units of the National Wild and Scenic Rivers System), is the only major river in the eastern United States that remains undammed, providing unimpeded flows and ecologic connectivity that support scenic, recreational, ecological, cultural, and geological values.
- The Upper Delaware Scenic and Recreational River sets the standard for exceptional water quality and healthy riparian ecosystems in the Mid-Atlantic Region.
- Management of the Upper Delaware Scenic and Recreational River is achieved through collaborative partnerships with local, state, and federal governments and local land owners; this is the first such management model in the National Wild and Scenic Rivers System.
- Picturesque gorges, rock outcroppings, steep forested slopes, gently rolling hills, and pastoral cultural landscapes, farms, and communities contribute to the regionally significant scenic quality of the Upper Delaware River.
- The Upper Delaware Scenic and Recreational River corridor's pristine resources offer outstanding river recreation in close proximity to the most densely populated region in the United States.
- The Upper Delaware Scenic and Recreational River exhibits some of the highest ecological integrity found in any of the large rivers of the mid-Atlantic and northeastern states.

• The entire free-flowing mainstem Delaware River is one of the few rivers in the United States that provides unimpeded access to historic spawning and rearing habitats for sea-run migratory species such as the American shad and American eel.

- North America's oldest existing wire cable suspension structure,
 Roebling's Delaware Aqueduct carried the Delaware and Hudson Canal
 over the Delaware River, carrying anthracite coal to the Hudson River.
 From there the coal was transported to New York City and throughout
 the East Coast, providing fuel for the American Industrial Revolution.
- The Upper Delaware River Valley preserves a rich cultural heritage including outstanding examples of mid-Atlantic riverside communities that have retained qualities and values of earlier times.
- Zane Grey, "Father of the Western Novel," made his home on the banks of the Upper Delaware River, where he wrote many of his most successful books, including *Riders of the Purple Sage*.



Fundamental Resources and Values

Fundamental resources and values (FRVs) are those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to warrant primary consideration during planning and management processes because they are essential to achieving the purpose of the unit and maintaining its significance. Fundamental resources and values are closely related to a unit's legislative purpose.

Fundamental resources and values help focus planning and management efforts on what is truly significant about the NPS unit. If fundamental resources and values are allowed to deteriorate, the purpose and/or significance could be jeopardized. One of the most important responsibilities of NPS managers is to ensure the conservation and public enjoyment of those qualities that are essential (fundamental) to achieving the purpose of the unit and maintaining its significance.

The following fundamental resources and values have been identified for Upper Delaware Scenic and Recreational River:

- Water Quality: The Delaware River serves as a regional reference condition river for water quality and biological assessments. The uses that are most dependent on the extraordinarily clean water are water supply that requires little treatment, excellent habitat for thriving aquatic life, and water-based recreation.
- Free-flowing Condition: The free-flowing condition of the main stem of the Upper Delaware River maintains connectivity to and from the Atlantic Ocean. Despite slight waterway modifications and several dams on tributary rivers, the Delaware River is the last major undammed river on the Atlantic Coast and provides unimpeded access to historic spawning and rearing habitats for sea-run migratory species.
- Cultural: Dating from the Paleo through the Transitional period, more than 430 documented precontact archeological sites record a rich cultural tapestry of riverine occupation of aboriginal people who used the river as a trade route. In addition, remnants of the early settlements along the river help to convey the history of the early subsistence period to the mid-1700s. The river and valley defined the historic transportation routes that were spurred by early 1800s technological development. The first privately owned business in the United States to be capitalized for \$1 million, the Delaware and Hudson Canal operated from 1829 to 1898; Roebling's Delaware Aqueduct (a national historic landmark and national historic civil



engineering landmark) carried the canal across the Delaware, and now many elements of the canal comprise archeological deposits. A canalera lock tender's house and barn, the Corwin Farm, still remains along an intact portion of the canal. The Erie Railroad, America's first long line railway, connected New York City with the Great Lakes and brought vacationers from New York and Philadelphia, among other cities. One notable vacationing fisherman, author Zane Grey, established a home on the Delaware in Lackawaxen, Pennsylvania, where he wrote his earliest articles and books, including Riders of the Purple Sage. The NPS owns and manages a museum at the Zane Grey House. Throughout the Upper Delaware River corridor, historic bridges, National Register of Historic Places (NRHP)-listed sites and districts, rural communities, and traditional industries such as bluestone quarrying and logging help to further tell the cultural stories of the Upper Delaware Scenic and Recreational River.

- Ecological: As the least-developed section of the last major river on the Atlantic Coast, undammed the entire length of its main stem, the Upper Delaware Scenic and Recreational River sustains some of the highest ecological integrity found in any of the large rivers of this region. Exceptional water quality, resulting from a predominately forested landscape, sustains high-quality fish and aquatic insect assemblages. Excellent in-channel conditions result in an abundance of riffles, runs, and pools, and a diversity of in-stream habitats. These aquatic conditions, combined with superior riparian habitat and coupled with a functioning floodplain, provide great hydrological connectivity, structure, and function. The Upper Delaware Scenic and Recreational River's ecological value extends beyond this segment of river; it provides regionally important high-quality historic spawning and rearing habitat for sea-run migratory fish, provides inland bald eagle wintering habitat for birds from as far away as the maritime provinces of Canada, and serves as a migratory bird stopover along the Atlantic flyway.
- Geological: The Upper Delaware Scenic and Recreational River is an exceptional
 example of a deep, narrow river valley cutting across the Small Lakes section of the
 glaciated portion of the Appalachian Plateau. The overall landscape is a stream-cut
 landscape modified by stream derangements from glacial deposits burying portions
 of preglacial valleys. Examples of significant geologic features include sandstone
 cliffs, barbed tributaries, glacial deposits, glacial outwash terraces, diverse channel
 morphologies, exposed ancient bedrock, bedrock knobs, cutoff incised meanders,
 island complexes, gorges, and fossils.
- Recreational: River corridor activities include canoeing, kayaking, boating, tubing, rafting, SCUBA diving, snorkeling, swimming, hunting waterfowl, and year-round world class fishing (guided or independent). Other recreational activities include photography, wildlife viewing, birdwatching, picnicking, trapping and hunting for both small and large game, bicycle touring, hiking, and cross-country skiing. Sightseeing opportunities can be found at numerous scenic overlooks. Auto and motorcycle touring and bicycling are popular along the Upper Delaware Scenic Byway (New York State Route 97), which concurrently includes New York State Bicycle Route 17 and connects to Pennsylvania Bicycle Route Y. Camping at primitive and developed commercial campgrounds, fall foliage viewing, antiquing, community festivals, ziplining, sporting activities, geocaching, scientific research, education activities, and ranger-led activities are also popular. Eagle watching is particularly popular in the Lackawaxen area during the winter months.
- Scenic: The scenic quality of the Upper Delaware River is characterized by its picturesque gorge, riparian vegetation, steep forested slopes, and gently rolling hills. The agricultural fields and livestock pastures add variety to this tranquil scene, along with rock outcroppings, cliff faces, and exposed unusual sedimentary formations. Charming rural communities' architecture also contributes to the stimulating visual variety of the Upper Delaware.



Interpretive Themes

Interpretive themes are an organizational tool. They provide the conceptual framework for visitor experience planning and programming. Interpretive themes are derived from and capture the essence of a unit's significance, resources, and values. They can help to explain why a story is relevant to people who may be unconnected to an event, time, or place. Themes go beyond a description of an event or process; they reflect the context and effects of those events or processes in order to foster opportunities to experience and consider the meanings, concepts, and values represented by a unit's resources.

While themes are important as a framework to help guide interpretation and management decisions, they are not necessarily intended for public use. They serve to focus and develop visitor experience, services, and programming.

The following interpretive themes have been identified for Upper Delaware Scenic and Recreational River:

- The Upper Delaware Scenic and Recreational River is a vital respite in the densely populated mid-Atlantic region, offering opportunities to connect with nature, healthy recreation, spectacular scenic views, and a sense of place.
- The free-flowing Upper Delaware Scenic and Recreational River harbors an intact riverine ecosystem that illustrates the importance of connectivity for communities of life.
- The undammed Delaware River provides an example of the role of rivers on the landscape as important riverine/marine ecological links, and a reference condition for how other rivers functioned prior to dams.
- The management model of the Upper Delaware Scenic and Recreational River corridor demonstrates that protection of resources is the responsibility of all levels of government and all individuals, working collaboratively.
- The Upper Delaware River region was occupied for thousands of years by Native Americans who were attracted to its fertile land, vegetation, and wildlife. The lush valley, which later promised opportunity to European settlers, has continued to attract residents and visitors throughout the centuries.
- The Upper Delaware River has provided transportation connections to the mid-Atlantic area since the 1700s, allowing residents to transport timber, coal, bluestone, and local products to coastal markets.
- Roebling's Delaware Aqueduct carried the Delaware and Hudson Canal over the Delaware River. The oldest cable suspension structure in the U.S. with its historic elements intact, it is a testament to the engineering genius of John A. Roebling.
- Prolific author Zane Grey, known as "the father of the western novel," was inspired to launch his early writing career on the banks of the Upper Delaware River.

Part 2: Dynamic Components

The dynamic components of a foundation document include special mandates and administrative commitments and an assessment of planning and data needs. These components are dynamic because they will change over time. New special mandates can be established and new administrative commitments made. As conditions and trends of fundamental resources and values change over time, the analysis of planning and data needs will be revisited and revised, along with key issues. Therefore, this part of the foundation document will be updated accordingly.

Special Mandates and Administrative Commitments

Many of the management decisions for an NPS unit are directed or influenced by special mandates and administrative commitments with other federal agencies, state and local governments, utility companies, partnering organizations, and other entities. Special mandates are requirements specific to a unit that must be fulfilled. Mandates can be expressed in enabling legislation, in separate legislation following the establishment of the unit, or through a judicial process. They may expand on unit purpose or introduce elements unrelated to the purpose of the unit. Administrative commitments are, in general, agreements that have been reached through formal, documented processes, often through memoranda of agreement. Examples of administrative commitments include easements, rights-of-way, and arrangements for emergency service responses. Special mandates and administrative commitments can support, in many cases, a network of partnerships that help fulfill the objectives of the unit and facilitate working relationships with other organizations. They are an essential component of managing and planning for the Upper Delaware Scenic and Recreational River.

The NPS must manage the Upper Delaware Scenic and Recreational River by combining the applicable mandates of the Wild and Scenic Rivers Act (PL 90-542) with the special provisions of the Upper Delaware Act (PL 95-625) and the National Park Service Organic Act.

Congress charged the Secretary of the Interior (NPS) to cooperate with the Delaware River Basin Commission, the directly affected states (Pennsylvania and New York), and local governments to

- protect our outstanding water quality, free flow and "Outstandingly Remarkable" natural, cultural, scenic, recreational and geologic values, in addition to free flow and water quality—described in the NPS report, "Delaware River Basin National Wild and Scenic River Values," available at www.nps.gov/upde/.
- · establish guidelines for land and water use management
- develop, approve, and submit to the governors a management plan providing for a broad range of land and water uses and scenic and recreational activities compatible with the Wild and Scenic Rivers Act and Upper Delaware Act provisions, and the Land and Water Use Guidelines
- establish a program of coordinated implementation and administration of the management plan

The Land and Water Use Guidelines and the 1986 Final River Management Plan for the Upper Delaware Scenic and Recreational River are designed to give managing agencies and the public specific directions for carrying out the management requirements contained in the enabling legislation. The Guidelines' purpose is to implement the legislation. All affected federal, state, and local agencies have been required to act in a manner consistent with the Upper Delaware legislation since 1978. The Guidelines contain the specific actions and administrative commitments for protecting the Upper Delaware Scenic and Recreational River corridor by assuring partners "substantially conform" with the Guidelines, as intended by the enabling legislation. The Guidelines recognize the important role and contributions of local governments in land management and apply to the relevant activities of county, state, and federal agencies.

The provisions in the land use section of the Guidelines ensure protection of the outstandingly remarkable values of the Upper Delaware River corridor that were identified and quantified in the 1978 congressional designation. The Guidelines seek to protect water quality, preserve natural features, provide for recreational uses, provide for the continuation of agriculture, conserve river resources, and maintain existing land use patterns. They do not limit the rights of owners to maintain lawfully established uses. They do not limit rights to fish, hunt, trap, or harvest eels on any lands or waters (subject to property owner approval), nor do they require a change in the existing laws and programs that regulate these uses. They do not limit the continuation of lawfully existing agricultural, forestry, or mining operations, nor do they impose any restrictions, other than the continuation of existing state and local laws, on farming. Furthermore, the Guidelines do not limit the return of property, and property uses damaged as a result of disaster, to conditions existing prior to such disaster.

The water use portion of the Guidelines, together with the water use section of the River Management Plan, provide an overall framework for managing the uses of the waters of the Upper Delaware River. The Guidelines focus on managing the river through educating and informing the public, as well as through the strict enforcement of existing laws and regulations.

For more information about the special mandates and administrative commitments for Upper Delaware Scenic and Recreational River, please see appendix C.



Assessment of Planning and Data Needs

Once the core components of part 1 of the foundation document have been identified, it is important to gather and evaluate existing information about the NPS unit's fundamental resources and values, and develop a full assessment of the unit's planning and data needs. The assessment of planning and data needs section presents planning issues, planning projects that will address these issues, and the associated information requirements for planning, such as resource inventories and data collection, including GIS data.

There are three sections in the assessment of planning and data needs:

- 1. analysis of fundamental resources and values
- 2. identification of key issues
- 3. identification of planning and data needs (including spatial mapping activities or GIS maps)

The analysis of fundamental resources and values and identification of key issues leads up to and supports the identification of planning and data collection needs.

Analysis of Fundamental Resources and Values

The fundamental resource and value analysis table includes current conditions and trends, potential threats and opportunities, planning and data needs, and selected laws and NPS policies related to management of the identified resource or value. Detailed analyses of fundamental resources and values are provided in appendix A.

Identification of Key Issues

This section considers key issues to be addressed in planning and management, and therefore takes a broader view over the primary focus of part 1. A key issue focuses on a question that is important for an NPS unit. Key issues often raise questions regarding unit purpose and significance, and fundamental resources and values. For example, a key issue may pertain to the potential for a fundamental resource or value in an NPS unit to be detrimentally affected by discretionary management decisions. A key issue may also address crucial questions not directly related to purpose and significance, but still indirectly affects them. Usually a key issue is one that a future planning effort or data collection needs to address and requires a decision by NPS managers.

The following are key issues for the Upper Delaware Scenic and Recreational River. Planning and data needs to address these issues are included in the tables below.

• Coordination of Efforts: The unique management structure of the Upper Delaware Scenic and Recreational River requires a high degree of collaboration between NPS staff, local communities and stakeholder groups, landowners, counties, states, other federal agencies, and the Upper Delaware Council. Achieving this high degree of collaboration, and the communication it requires, is challenging as issues become increasingly complex and budgets are further constrained. Since the adoption of the River Management Plan in 1986, the roles, responsibilities, vision, and goals of the various stakeholders charged with protecting the Upper Delaware have evolved. In order to provide greater coordination of efforts and leveraging of limited resources, it is critical that these partners have a clear, consistent, and current understanding of the role each entity plays in protecting the Upper Delaware Scenic and Recreational River. Working with partners to improve this understanding is a key challenge.

- River Management Plan: Under the framework developed in the 1986 River Management Plan, the NPS and its partners are required to periodically evaluate and update the River Management Plan to allow it to adapt to changing conditions and community needs. The River Management Plan and the Land and Water Use Guidelines may be amended only through the same procedure by which they were originally approved, thus requiring the same public involvement, consultation, and legal compliances that were required as part of the original planning process. Evaluation targeted for 20 years after the plan's adoption never occurred. Making a commitment to proceed with the comprehensive review, and working with partners to clarify the roles and responsibility for completing this task, is an important challenge.
- Improving Community Relationships: Improving relationships with landowners and the townships along the Upper Delaware and their perception of the NPS is an important management goal. Through these improved relationships, managers of the Upper Delaware Scenic and Recreational River hope to gain a better understanding of how community needs overlap with the NPS management goals. How community needs overlap may include means to resume or expand contracts for local law enforcement and trash removal, facilitating increasing wireless and internet connectivity, providing for increased safety along the river, as well as undertaking marketing efforts to provide for increased visitation, associated tourism revenue, and more easily understood guidelines for land development needs. Identifying these areas of overlap, and working closely with communities to provide assistance on these fronts, will further improve relationships and the perception of the NPS within local communities.
- Improving Baseline Cultural and Natural Resource Information: Further developing or improving baseline datasets documenting the cultural and natural resources within the river corridor is an important need for management that relates to all its fundamental resources and values. These datasets are needed to effectively track change to the resources over time, and the sources of and influences on that change. Providing a robust resource tracking system will help the NPS and its partners make informed decisions about resource management within the river corridor.

Planning and Data Needs

To successfully undertake planning efforts and maintain connection to the core foundation elements and their importance, information will be required to provide adequate knowledge of unit resources and visitor use. The data needs identified here include inventories, studies, research activities, analyses, and geospatial mapping work directly related to protecting fundamental resources and values, unit significance and purpose, and addressing key issues.

Items considered of the utmost importance were identified as high priority. Other items identified, but not rising to the level of high priority, were listed as either medium- or low-priority needs. These priorities inform NPS management's efforts to secure funding and support for planning projects.

Planning Needs – Where A Decision-Making Process Is Needed			
Related FRV or Key Issue	Planning Needs	Rationale	Priority (H, M, L)
Ecological, Recreational	Marketing strategy	A marketing strategy would identify specific measures that staff could take to increase awareness of the significance and the economic value of (1) the ecosystem services (e.g., clean water) that the Delaware River Basin provides; (2) tourism opportunities on the river; and (3) targeted partnerships that could develop to attract additional visitors to the valley.	Н
Cultural	Land protection plan	A land protection plan would identify particularly unique, fragile, or important cultural and natural resources within the designated river corridor, and specific options for their long-term protection and preservation. The plan may also identify potential protection measures such as conservation easements, local zoning ordinances, or acquisition by federal, state, local, or nonprofit entities from willing sellers or donors. Maintaining private property rights would be paramount in developing this plan.	Н
Cultural	National historic site / landmark nomination for Corwin Farm	Research and preparation of a nomination for the Corwin Farm to the National Register of Historic Places would assure the site is recognized for its place in interpreting the history of the Delaware and Hudson Canal.	Н
Cultural	Landscape treatment plan for the Corwin Farm	A landscape treatment plan for the Corwin Farm site would identify period-appropriate landscape treatments and compatible visitor facilities on the site.	Н
Cultural, Ecological, Geological	Long-range interpretive plan	A long-range interpretive plan is needed to identify specific strategies for communicating the Upper Delaware Scenic and Recreational River's interpretive themes to visitors and the public.	Н
Free-flowing Condition, Ecological, Coordination of Efforts	Partner action strategy	The partner action strategy is an approach to aligning NPS and partner goals, resulting in a tangible action strategy that defines the future direction of the partnership. Participants in the strategy may include local townships, the Upper Delaware Council, the Delaware River Basin Commission, and state entities. The strategy would clarify NPS and partner roles and identify mutually beneficial strategies, actions, and tools for implementation. This effort would enhance the ability of the unit to meet mission critical goals now and into the future.	Н
Ecological, Improving Baseline Cultural and Natural Resource Information	Data management plan	A data prioritization and management plan would enhance the strategy for the identification of datasets needed to measure baseline conditions and provide for long-term monitoring of resources and impacts. The plan would include an assessment of the interrelationships of the identified needs and would identify strategies for long-term data collection, stewardship, and updating.	Н
Water Quality	Basinwide watershed management plan	The basinwide watershed management plan is a planning effort in which NPS staff should actively participate. The effort is led by other basin stakeholders.	Н

Planning Needs – Where A Decision-Making Process Is Needed			
Related FRV or Key Issue	Planning Needs	Rationale	Priority (H, M, L)
Cultural	Accessibility plan for Corwin Farm	An accessibility plan would help to ensure that visitor facilities at the Corwin Farm site comply with the Americans with Disabilities Act and Architectural Barriers Act.	Н
All FRVs, Coordination of Efforts	Partnering strategy ("friends" group)	A partnering strategy would further leverage existing funding, as well as community and stakeholder support, by identifying specific outreach efforts needed to foster the development of a friends group.	Н
Scenic	River management plan addendum	New management challenges that did not exist during the development of the original river management plan for the Upper Delaware River necessitate an amendment to the plan. Through collaboration with local, state, and community partners, the river management plan addendum would identify current issues, trends, threats, and opportunities within the river corridor, and identify specific recommendations for the protection of the wild and scenic river's outstandingly remarkable values.	Н
Recreational	Visitor use management plan	A visitor use management plan is needed to identify appropriate types and levels of recreational use on the river. The plan would assess existing visitor use characteristics and patterns, assess visitor impacts on resources, enhance opportunities for key visitor experiences, reduce conflicts between different user groups or between visitors and wildlife, minimize impacts to resources, private property and visitor experiences caused by visitor use, and manage visitor demand at popular destinations.	M
Cultural, Scenic	Updated development concept plan for the Roebling Bridge	The current development concept plan from the 1995 <i>Delaware Aqueduct Site Schematic Design / Environmental Assessment</i> needs to be updated to reflect current site conditions and management objectives.	M
Ecological	Geospatial data management plan	The geospatial data management plan is needed to identify geospatial and tabular datasets required to provide decision support for the management of the scenic and recreational river. The plan would identify strategies for long-term data collection, stewardship, and updating. The management plan would also identify analysis products that the unit could use to support ongoing planning and management efforts.	M
N/A	Maintenance and operation facility feasibility and functional space utilization plan	The current maintenance facility is inadequate to support the NPS maintenance infrastructure. A feasibility study would identify potential locations, space programs, and site design for a new facility.	М

	Planning Needs – Where A Decision-Making Process Is Needed		
Related FRV or Key Issue	Planning Needs	Rationale	Priority (H, M, L)
Ecological	Fisheries management plan	A fisheries management plan is needed to provide guidance on the sustainable management of recreational fishing on the river. The plan would identify strategies for species monitoring and conservation of fish habitat, as well as providing information as to whether the existing regulations may lead to impairment. The plan would also address minimum ecological flows, different life stage needs of fish species, as well as management strategies for potential impacts on fish populations from didymo or other invasive species such as snakeheads and Asian carp.	М
Cultural	Updated collections management plan	The existing collections management plan does not provide current, up-to-date guidance for collections management and best practices.	М
Cultural	Exhibit plan for Corwin Farm	This plan would provide overarching guidance for museum exhibit displays at a future visitor contact area at the Corwin Farm.	L
Cultural	Interpretive plan for Corwin Farm	Tiered from the long-range interpretive plan, an interpretive plan for Corwin Farm would identify interpretive exhibits and programming specific to that site.	L



Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related FRV or Key Issue	Data Needs	Rationale	Priority (H, M, L)
All FRVs	Baseline land use data	Establishing baseline land use data would confirm development trends and identify land use management. The data management plan would provide strategies for long-term data collection, stewardship, and updating.	Н
All FRVs	Issues database / clearinghouse	A digital database needs to be developed to track all resource issues in the river corridor in order to analyze cumulative effects and then compare these to baseline data. This plan would also establish a system of managing "substantial conformance" and assuring consistency with the Land and Water Use Guidelines. The data management plan would provide strategies for long-term data collection, stewardship, and updating.	Н
Water Quality	Compilation of existing water quality data to provide baseline conditions assessment	Various sources of water quality and resource data for the river and watershed exist. This study would combine these existing data into a single report and provide a comprehensive analysis in order to develop a broad picture of baseline conditions in the river and its tributaries. This report would also aid in identifying potential threats to these baseline conditions from various activities in the watershed.	Н
Water Quality	Long-term water quality monitoring	Permanent funding is needed to provide for long-term coordinated water quality monitoring on the Delaware River and its tributaries. This might be developed as a permanent cooperative effort between the Delaware Basin River Commission, the NPS, and the states of New York, Pennsylvania, and New Jersey.	Н
Recreational	Expanded visitor counting program	This would include visitor counts outside the parameters of those available through the NPS Public Use Statistics Office, because the communities within the river corridor are in need of a way to obtain more accurate visitor counts. NPS staff would like to provide technical assistance to communities to achieve this, in order to develop a comprehensive assessment of visitation to the Upper Delaware River basin.	Н
Scenic	Viewshed inventory	This would inventory and assess iconic visual resources in the river corridor—including historic bridges and prominent viewpoints—to provide a baseline assessment of these visual resources in order to assess potential impacts from future development. The data management plan would provide strategies for long-term data collection, stewardship, and updating.	Н
Scenic, Recreational	Study for sustainable rural economy	This study, which might be developed in cooperation with a university, would be used to identify new and existing industries that then could be sustained within the river corridor without negatively impacting the river's outstandingly remarkable values.	М
Water Quality	Long-term biological monitoring of macro- invertebrates	Long-term monitoring of aquatic macro-invertebrates needs to be coordinated with Delaware River Basin Commission and NPS Eastern Rivers and Mountains Network at established sites to assess ecosystem health.	М

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related FRV or Key Issue	Data Needs	Rationale	Priority (H, M, L)
Ecological	American eel study	A study to assess the status and trends of the American eel population in the Upper Delaware River is needed to monitor this keystone species.	М
Ecological	Baseline data on status of threatened and endangered species	This study would assess the existing distribution and overall health of threatened and endangered species within the river corridor, including the dwarf wedgemussel.	М
Free-flowing Condition	Free-flow assessment and impediments inventory	This study would build on limited existing data to comprehensively document the existing impediments to free flow along the entire Upper Delaware River, and would provide an analysis to assess the overall cumulative impact of various impediments to free flow such as bank hardening.	М
Water Quality	Flow needs study	There is a need to understand how much human occupation has altered the natural flow regime and to identify ecological flow needs of certain species in the river. This study would assess these needs and identify thresholds for concern. This study would also build on work that The Nature Conservancy is doing to understand flow regimes and their ecological effects.	M
Recreational	Visitor use survey	This study would aid in developing a more comprehensive understanding of visitors to the Upper Delaware River, their perceptions, preferences, and activities. The information from this study would aid in the development of a visitor use management plan and would assist in identifying strategies to improve visitor experiences in the river corridor by working with local partners.	М
Cultural	GIS data of properties listed on and eligible for the National Register of Historic Places	These data would assist with developing a baseline geographic assessment of NRHP-listed and -eligible properties in the river corridor. The geospatial data management plan would provide strategies for long-term data collection, stewardship, and updating.	М
Improving Community Relationships	Local community perception/ feedback survey	This survey would sample a representative portion of community members within the river corridor to better gauge community perceptions toward the NPS and would identify areas in which NPS assistance may be beneficial for communities, stakeholders, and landowners. This would allow the staff to better direct their energy toward the needs of the community, which in turn would better protect the river corridor.	M
Cultural	Traffic study for Corwin Farm	A traffic study is needed at the Corwin Farm to inform future site improvements.	L
Scenic, Ecological	Air quality baseline data and monitoring	Staff would work with the NPS Eastern Rivers and Mountains Network, NPS Air Resource Division, and the states to provide air quality baseline data and long-term monitoring.	L

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related FRV or Key Issue	Data Needs	Rationale	Priority (H, M, L)
Scenic	Night skies baseline and monitoring	Baseline data are needed to assess the current quality of night skies in the river corridor. These baseline data may be used to provide accurate assessments of the impacts from development in and adjacent to the river corridor, update the Land and Water Use Guidelines, and promote zoning and development practices that protect night skies.	L
Water Quality	New gauging stations on tributaries	Updated gauging and continuous water quality monitoring stations on the river and its tributaries would provide for more accurate and comprehensive water quality and flow monitoring.	L
Water Quality	Source detection studies	This study would identify nonpoint and point source contamination that could contribute to degrading water quality in the river.	L
Ecological	Baseline data on nonnative species	Baseline data are needed to determine the prevalence of both terrestrial and aquatic nonnative species within the river corridor.	L
Recreational	Updated visitor capacity study	An updated visitor capacity study would support the development of a visitor use management plan.	L
Recreational	Trail feasibility study	This study would identify potential routes for a long-distance trail parallel to the river. It would identify existing rights-of-way, partnership opportunities, and opportunities to connect into other long-distance trails in the region.	L
Cultural	Historic resource study of timber rafting, tanneries, and acid factories in the river corridor	This study would expand upon the 1982 five-volume cultural resources survey to include timber rafting, tanneries, and acid factories in the corridor and the inventory of historic resources in the river corridor related to timber rafting, tanneries, and acid factories.	L
Geological	Unique land resources inventory and assessment	Develop a comprehensive inventory and assessment of significant geological features. This inventory would guide preservation, interpretation, and education regarding geologic resources.	L



Part 3: Contributors

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Appendixes

Appendix A: Fundamental Resource and Values Analysis Tables for Upper Delaware Scenic and Recreational River

The fundamental resource and value analysis tables include current conditions and trends, potential threats and opportunities, planning and data needs, and selected laws and NPS policies related to management of the identified resource or value.

Fundamental Resource or Value	Water Quality
Description of the FRV	The Delaware River serves as a regional reference condition river for water quality and biological assessments. The uses that are most dependent on the extraordinarily clean water are water supply that requires little treatment, excellent habitat for thriving aquatic life, and water-based recreation.
Current Conditions	 The water quality of the Upper Delaware Scenic and Recreational River is exceptional, based upon extensive sampling done by the Delaware River Basin Commission (DRBC), National Park Service, U.S. Geological Survey (USGS) and other agencies to define "Existing Water Quality." The DRBC's special protection waters regulations apply to the river, regulating wastewater discharges that affect water quality. The river has also been included in the designation of "Outstanding Basin Waters" by the commission.
Trends	There has been a slight increase in conductivity.
Threats	 Potential development of sites adjacent to the river affects water quality. New land uses constitute a clear and direct threat if they are incompatible with, or counter to, the substance of the Upper Delaware River Management Plan and the principles and objectives of the Land and Water Use Guidelines required by the Upper Delaware Scenic and Recreational River Act and the Wild and Scenic Rivers Act. Inadequate sewage treatment and septic systems affect water quality. Flooding affects water quality. Runoff from parking lots and roads exacerbates stormwater flows and leads to increased conductivity and salinity of water as a result of road salt and surface contaminants. Agricultural runoff can cause nutrient loading in the river. Siltation (erosion and sedimentation) affects water quality. Flows and temperature fluctuations can affect water quality. Didymo increasing in the river can potentially affect water quality. Changes in the riparian cover affects water quality. Invasive species affect water quality. Large scale changes in land cover and land use affect water quality.
Opportunities	 Work with local townships. Coordinate with enforcement agencies for investigation and enforcement (federal, state, and counties). Collaborate with farmers and Cooperative Extension Service offices to assure sustainable, practical agriculture methods are employed throughout the watershed. Work with drinking water suppliers. Continue working with Philadelphia benefactors to become more engaged with protecting and funding water quality, and consider incentivizing protection of water sources and land upstream, similar to the program for the protection of water and land in the upstream New York City reservoir system. Continue to seek innovative funding opportunities. Coordinate with other stakeholders in planning and legislation (proposed Delaware River Basin Conservation Act).

Fundamental Resource or Value	Water Quality
Existing Data and Plans Related to the FRV	 DRBC Scenic Rivers Monitoring Program existing water quality data, which includes data for 22 Upper Delaware sites. NPS unit continuous water quality monitoring data. Ongoing work with the U.S. Geological Survey to assess water quality or define existing water quality in some tributaries. Delaware River Basin Commission comprehensive plans. Eastern Rivers and Mountains Inventory and Monitoring Network has a long-term monitoring plan for their NPS units. Technical specialist report of the outstandingly remarkable values document.
Data and/or GIS Needs	 Baseline land use data. Issues database/clearinghouse. Compilation of existing water quality data to provide baseline conditions assessment. New gauging and continuous monitoring stations on river and tributaries. Ecological flow needs study. Long-term biological monitoring of macro-invertebrates. Source detection studies. Long-term water quality monitoring.
Planning Needs	Basinwide watershed management plan.Partnering strategy ("friends" group).
Laws and Policies That Apply to the FRV, and NPS Policy-level Guidance	Laws and Policies That Apply to the FRV Wild and Scenic Rivers Act (1968) Clean Water Act Executive Order 11514: "Protection and Enhancement of Environmental Quality" Executive Order 11988: "Floodplain Management" Executive Order 12088: "Federal Compliance with Pollution Control Standards" Endangered Species Act of 1973, as amended National Invasive Species Act Lacey Act, as amended Federal Noxious Weed Act of 1974, as amended Clean Air Act (42 USC 7401 et seq.) Executive Order 13112, "Invasive Species" Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" Final River Management Plan for the Upper Delaware Scenic and Recreational River (1986) Land and Water Use Guidelines NPS Policy-level Guidance NPS Management Policies 2006 (§4.3.4) Director's Order 77-2: Floodplain Management Special Directive 93-4 "Floodplain Management, Revised Guidelines for National Park Service Floodplain Compliance" (1993) National Flood Insurance Program (44 CFR 60) NPS Natural Resource Management Reference Manual 77

Fundamental Resource or Value	Free-flowing Condition
Description of the FRV	The free-flowing condition of the main stem of the Upper Delaware River maintains connectivity to and from the ocean, despite slight waterway modifications and several dams on tributary rivers.
Current Conditions	 The Upper Delaware River is in good condition and relatively unimpeded. River flow is regulated from reservoirs on tributaries. Flow must be maintained at 1,750 cubic feet per second at Montague, New Jersey (83 miles south of Hancock, New York, on the main stem). The bed and banks of the river are managed through the section 404 permit process by the U.S. Army Corps of Engineers.
Trends	An increased number and intensity of precipitation events in the northeast has changed the volumes and seasonal flow patterns of the Upper Delaware.
Threats	 Flooding, trenching, dredging, and filling cause a build-up of sediment and change the channelization and flow of the river. Increased intensity and number of precipitation events as a result of climate change contribute to erosion problems. Increased development of infrastructure and impervious surfaces on privately owned land and other bank developments could increase stream flashiness (speed of runoff) and result in channelization. Public perception that flood control measures are necessary could result in unauthorized modifications to the river. Dams trap river sediments and may also starve river sections of natural sediment movement/deposition. Flow regimes that focus on human needs rather than ecosystem needs.
Opportunities	 Continue basinwide coordination with public and associated agencies. Increased monitoring and coordination with the issuing of section 404 permits by the U.S. Army Corps of Engineers. Produce a 21st century version of the Upper Delaware Scenic and Recreational River Design Handbook to reflect Guidelines and include best management practices. Incorporate elements of the Wild and Scenic Rivers Guide for Riverfront Property Owners into the best management practices. Lead an awareness campaign, in coordination with county soil and water conservation districts and other partners, about best management practices for local landowners. Lead an awareness campaign about ecological flow needs.
Existing Data and Plans Related to the FRV	 Delaware River Basin Wild and Scenic River Values, 2012. Data from the Delaware River Basin Commission. Photograph database of potential impediments. USGS flows data. Technical specialist report of the outstandingly remarkable values document.
Data and/or GIS Needs	 Baseline land use data. Issues database/clearinghouse. Free-flow assessment and impediments inventory.
Planning Needs	 Partner action strategy (with the Delaware River Basin Commission and partners to further develop the Flexible Flows Management Program to meet the needs of both water consumers and the ecology). Partnering strategy ("friends" group).

Fundamental Resource or Value	Free-flowing Condition
Laws and Policies That Apply to the FRV, and NPS Policy-level Guidance	 Laws and Policies That Apply to the FRV Wild and Scenic Rivers Act (1968) Clean Water Act Executive Order 11514: "Protection and Enhancement of Environmental Quality" Executive Order 11988: "Floodplain Management" Executive Order 12088: "Federal Compliance with Pollution Control Standards" Final River Management Plan for the Upper Delaware Scenic and Recreational River (1986) Land and Water Use Guidelines NPS Policy-level Guidance NPS Management Policies 2006 (§4.3.4) Director's Order 77-2: Floodplain Management Special Directive 93-4 "Floodplain Management, Revised Guidelines for National Park Service Floodplain Compliance" (1993) National Flood Insurance Program (44 CFR 60) NPS Natural Resource Management Reference Manual 77



Fundamental Resource or Value	Cultural
Description of the FRV	Dating from the Paleo through the transitional period, more than 430 documented precontact archeological sites record a rich cultural tapestry of riverine occupation of aboriginal people who used the river as a trade route. In addition, remnants of the early settlements along the river help to convey the history of the early subsistence period to the mid-1700s. The river and valley defined the historic transportation routes that were spurred by early 1800s technological development. The first privately owned business in the United States to be capitalized for \$1 million, the Delaware and Hudson (D&H) Canal, operated along the river from 1829 to 1898 and Roebling's Delaware Aqueduct (a National Historic Landmark and National Historic Civil Engineering Landmark) carried the canal across the Delaware. A canalera lock tender's house and barn, the Corwin Farm, still remains along an intact portion of the canal. The Erie Railroad, America's first long line railway, connected New York City with the Great Lakes and brought vacationers from the cities. One notable vacationing fisherman, author Zane Grey, established a home on the Delaware at Lackawaxen, Pennsylvania, where he wrote his earliest articles and books, including <i>Riders of the Purple Sage</i> . The NPS owns and manages a museum at the Zane Grey House. Throughout the river corridor, historic bridges, National Register of Historic Places-listed sites and districts, rural communities, and traditional industries such as bluestone quarrying and logging help further tell the cultural stories of the Upper Delaware Scenic and Recreational River.
Current Conditions	 Museum collections are in good condition. The NPS owns some archeological sites but most are on private lands; 15 sites are in good condition and have GIS data. Early settlement remnants and ruins (e.g., trace and foundations) are in poor condition. Sites were categorized and catalogued in the 1980s with pictures. There is not a comprehensive inventory of ring bolts, rocks, and other artifacts related to the practice of timber rafting in the area. Bluestone (a feldspathic sandstone) is still a valuable commodity. Some former tanneries and acid factories could be hazardous sites. Roebling's Delaware Aqueduct is in good condition, but requires constant maintenance. Two historic Erie Railroad depots—Callicoon (eligible for the national register) and Old Cochection (listed in the national register)—remain in the corridor. As they are not NPS-owned, the NPS can offer technical assistance for their preservation. The Corwin Farm outhouse and playhouse are in good condition and the stone walls have been rebuilt. The Corwin Farm house, orchard, and landscape are in fair condition. The Corwin Farm canal remnants and walls are in poor condition. The Corwin Farm adaptive visitor use management study and design concept plan need to be initiated. The Zane Grey cultural landscape is aging and many trees are at the end of their lives. Staff plan to identify what to replace/restore to period of 1912–1918. Staff is working on an agreement with Commonwealth of Pennsylvania regarding use of the parking lot adjacent to the Zane Grey Museum. The redesign of the parking area would include accessibility compliance and part of the existing parking lot would be restored consistent with the time period. Currently four historic districts within the corridor are listed in the National Register of Historic Places, including Cochecton, New York; Damascus, Pennsylvania; Milanville, Pennsylvania; and Equinunk,

Fundamental Resource or Value	Cultural
Trends	Visitors often trespass on private land.
	The drainage system for Roebling's Delaware Aqueduct has caused problems with the retaining walls on the New York side.
Threats	 Archeological and early settlement remnant sites are vulnerable to disturbance, deterioration, and loss. Some former tanneries and acid factories may need to be reviewed for hazardous materials conditions. Zane Grey cultural landscape is potentially threatened by flooding, fire, security, trees, and potential future development in adjacent sites. The collection of NPS Upper Delaware oral history tapes are being digitized. They need to be transcribed and, using sensitivity for their content, made available to the public.
Opportunities	 Give technical assistance to local groups to inventory archeological and early settlement remnant sites, as requested. Work with the New York State Department of Transportation to promote preservation of historic bridges whenever possible. Partner with Delaware & Hudson Canal & Gravity Railroad Conservancy and the Delaware & Hudson Transportation Heritage Council to create recreational opportunities along the D&H Canal, such as a linear hiking/biking path along the tow path that connects to Scranton and the Hudson River Valley. Purchase private land on the fourth corner of Roebling's Delaware Aqueduct to protect the historic scene. Act as technical advisors to local historic societies, landowners, and others for Erie Railroad and train depots. Promote programs that the NPS provides to preserve historic buildings. Advertise tax incentives to building owners to preserve historic buildings. Include an exhibit on Upper Delaware culture at the proposed Upper Delaware Scenic Byway Visitor Center and/or Fort Delaware Museum of Colonial History in Narrowsburg, New York. Convert Corwin Farm to a visitor use area. Partner to protect Zane Grey cultural landscape.
	 Partner to protect Zane Grey Cultural landscape. Work with the U.S. Army Corps of Engineers, Pennsylvania Department of Transportation, and New York State Department of Transportation to protect historic bridges. Work with Damascus Historical Society to develop a walking tour. Identify other communities that may be eligible for listings in the National Register of Historic Places and provide technical assistance with NRHP nominations. Provide technical assistance as needed for individual NRHP properties. As ownership changes, notify new owners (through the Upper Delaware Council) if the property is eligible for listing. Hold workshops to let the public know about tax and other incentives for listing structures in the national register. Work with the regional office and other NPS units on a museum collection storage plan. Digitize and transcribe oral history tapes.

Fundamental Resource or Value	Cultural
Existing Data and Plans Related to the FRV	 Archeological and early settlement remnant sites overview and assessment. Cultural resource study and maps. Bluestone quarrying is addressed in Land and Water Use Guidelines. Roebling land acquisition plan. Corwin level 2 landscape inventory. Zane Grey historic structures report. NPS unit asset management plan. Oral history tape collection. Roebling's Delaware Aqueduct historic structures reports pre- and post-rehabilitation. Design concept plan and environmental assessment for Roebling's Delaware Aqueduct and appurtenances. Historic American Buildings Survey / Historic American Engineering Record (HABS/HAER) documentation for Delaware Aqueduct, the toll house, and the Zane Grey House. Upper Delaware cultural resources survey (five volumes) 1983. Technical specialist report of the outstandingly remarkable values document.
Data and/or GIS Needs	 Baseline land use data. Issues database/clearinghouse. Historic resource study of timber rafting, tanneries, and acid factories. Traffic study for Corwin Farm. GIS data of properties listed in and eligible for the National Register of Historic Places.
Planning Needs	 Land protection plan. Updated development concept plan for the Roebling Bridge. National historic site / landmark nomination for Corwin Farm. Long-range interpretive plan. Landscape treatment plan for Corwin Farm. Exhibit plan for Corwin Farm. Interpretive plan for Corwin Farm. Accessibility plan for Corwin Farm. Updated collections management plan. Partnering strategy ("friends" group).
Laws and Policies That Apply to the FRV, and NPS Policy-level Guidance	Laws and Policies That Apply to the FRV The Antiquities Act of 1906 Historic Sites, Buildings and Antiquities Act of 1935 National Historic Preservation Act of 1966, as amended (16 USC 470) American Indian Religious Freedom Act of 1978 Archeological Resources Protection Act of 1979 Native American Graves Protection and Repatriation Act of 1990 Executive Order 11593, "Protection and Enhancement of the Cultural Environment" Executive Order 13007, "Indian Sacred Sites" General Sites

Fundamental Resource or Value	Ecological
Description of the FRV	As the least-developed section of the last major river on the Atlantic Coast, undammed the entire length of its main stem, the Upper Delaware River sustains some of the highest ecological integrity found in any of the large rivers of this region. Exceptional water quality, resulting from a predominately forested landscape, sustains high-quality fish and aquatic insect assemblages. Excellent in-channel conditions result in an abundance of riffles, runs, and pools, and a diversity of in-stream habitats. These aquatic conditions, combined with good riparian habitat that is coupled with a functioning floodplain, provides great hydrological connectivity, structure, and function. The Upper Delaware River's ecological value extends beyond this segment of river; it provides regionally important high-quality historic spawning and rearing habitat for sea-run migratory fish, provides inland bald eagle wintering habitat for birds from as far away as the maritime provinces of Canada, and serves as a migratory bird stopover along the Atlantic flyway.
Current Conditions	 Deer overpopulation is affecting forest ecology. Hardwoods are not regenerating, which affects forest ecology, contributes to erosion problems, and can shift the snowpack. The rare plant ginseng is found in the forest. Programs by the Delaware Highlands Conservancy – Eagle Institute are a big draw to the river valley for visitors to view bald eagles.
Trends	 Deer populations are expected to increase in absence of disease and predators. Forest areas are shifting from deciduous to coniferous vegetation. Bald eagle populations are increasing. Goldenseal is on the decline.
Threats	 Deer, poaching, and development threaten rare plants found in the forest, such as ginseng. Deer populations may be contributing to declines in goldenseal. The shifting from deciduous to coniferous forest causes a loss of understory and changes the soil chemistry, which can affect water chemistry and snowpack. This could starve out deer. Emerald ash borer is working toward the area. Asian longhorned beetle is a potential threat. Hemlocks in the ravines are threatened by invasive species, particularly hemlock woolly adelgid. Japanese knotweed threatens native habitat, especially riparian habitat. Compressor stations may have an impact on air quality in the future. Energy and extraction infrastructure, including well pads and pipeline development, fragment habitat, and increase likelihood of invasive plant species introduction and spread. New land uses constitute a clear and direct threat if they are incompatible with, or counter to, the substance of the Upper Delaware River Management Plan and the principles and objectives of the Land and Water Use Guidelines required by the Upper Delaware Scenic and Recreational River Act and the Wild and Scenic Rivers Act.

Fundamental Resource or Value	Ecological
Opportunities	 Continue to support The Eagle Institute as a program of the Delaware Highlands Conservancy. Develop a partnership with the Delaware Highlands Conservancy and others to protect high-priority parcels from incompatible uses. Continue to monitor habitat impacts. Encourage state agencies to issue more permits for nuisance deer. Work with partner and volunteer groups to maintain intact habitat throughout the corridor. Educate the public on the concept of connectivity and on how the existing land use and land cover contribute to water quality. The upper basin is more than 80% forested land cover, which contributes to species connectivity and water quality. Educate the public on how water quality and ecological integrity contribute to tourism and ecological development. Work with Wayne Community College's Workforce Investment Act summer internship program to get help with data collection and management. Update natural resource databases throughout the corridor, particularly in Wayne County, Pennsylvania.
Existing Data and Plans Related to the FRV	 American shad sustainability plan, an ongoing planning effort within the four basin states. Formal monitoring program with Delaware River Basin Commission to understand didymo. Ongoing study to understand bald eagle habitat. Targeted mammal inventory. Fish inventory. Vegetation mapping of the corridor. Ongoing macroinvertebrates sampling in river and tributaries. Ongoing water quality monitoring. Young-of-the-year shad survey (ongoing) and adult shad surveys. Freshwater mussel inventories and dwarf wedgemussel studies. New York and Pennsylvania natural resource databases. Technical specialist report of the outstandingly remarkable values document.
Data and/or GIS Needs	 Baseline land use data. Issues database/clearinghouse. American eel study. Baseline data on nonnative species. Baseline data on status of threatened and endangered species. Air quality baseline data and monitoring.
Planning Needs	 Geospatial data management plan. Fisheries management plan. Long-range interpretive plan. Marketing strategy. Partner action strategy. Data management plan. Partnering strategy ("friends" group).

Fundamental Resource or Value	Ecological
Laws and Policies That Apply to the FRV, and NPS Policy-level Guidance	 Laws and Policies That Apply to the FRV The Wild and Scenic Rivers Act Endangered Species Act of 1973, as amended National Invasive Species Act Lacey Act, as amended Federal Noxious Weed Act of 1974, as amended Clean Water Act Clean Air Act (42 USC 7401 et seq.) Executive Order 13112, "Invasive Species" Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" Final River Management Plan for the Upper Delaware Scenic and Recreational River (1986) Land and Water Use Guidelines NPS Policy-level Guidance NPS Management Policies 2006 (1.6, 4.1, 4.1.4, 4.4.1, 4.7.2) NPS Natural Resource Management Reference Manual 77



Fundamental Resource or Value	Geological
Description of the FRV	The Upper Delaware Scenic and Recreational River is an exceptional example of a deep, narrow river valley cutting across the Small Lakes section of the glaciated portion of the Appalachian Plateau. The overall landscape is a stream-cut landscape modified by stream derangements from glacial deposits burying portions of preglacial valleys. Examples of significant geologic features include sandstone cliffs, barbed tributaries, glacial deposits, glacial outwash terraces, diverse channel morphologies, exposed ancient bedrock, bedrock knobs, cutoff incised meanders, island complexes, gorges, and fossils.
Current Conditions	There is one fossil in the collection and an unknown number of other fossils within the corridor.
Trends	There has been an increased number and intensity of precipitation events in the Northeast, which increases risk for geologic hazards.
Threats	 Visitor use at Hawk's Nest impacts the sandstone mountainside with graffiti as well as significant trash deposits. Road run-off creates channels down the rock faces throughout the corridor. Major sections of roads could wash away. There is the potential for earthquakes, slumping, and mass wasting. New land uses constitute a clear and direct threat if they are incompatible with, or counter to, the substance of the Upper Delaware River Management Plan and the principles and objectives of the Land and Water Use Guidelines required by the Upper Delaware Scenic and Recreational River Act and the Wild and Scenic Rivers Act.
Opportunities	 Interpret and educate about geology. Cooperate with states and local communities to ensure that the Land and Water Use Guidelines that were developed jointly by the National Park Service and Upper Delaware Council are relevant and upheld.
Existing Data and Plans Related to the FRV	 Technical specialist report of the outstandingly remarkable values document. Geologic resources inventory. Cultural resources survey 1983 section on geology.
Data and/or GIS Needs	 Baseline land use data. Issues database/clearinghouse. Unique land resources inventory and assessment.
Planning Needs	Long-range interpretive plan.Partnering strategy ("friends" group).
Laws and Policies That Apply to the FRV, and NPS Policy-level Guidance	 Laws and Policies That Apply to the FRV Wild and Scenic Rivers Act Clean Water Act Executive Order 11514: "Protection and Enhancement of Environmental Quality" Executive Order 11988: "Floodplain Management" Executive Order 12088: "Federal Compliance with Pollution Control Standards" National Flood Insurance Program (44 CFR 60) Final River Management Plan for the Upper Delaware Scenic and Recreational River (1986) Land and Water Use Guidelines NPS Policy-level Guidance NPS Management Policies 2006 (§4.6.1, 4.6.2, 4.6.4 and 4.8.1.1) Director's Order 77-2: Floodplain Management Special Directive 93-4 "Floodplain Management, Revised Guidelines for National Park Service Floodplain Compliance" (1993)

Fundamental Resource or Value	Recreational					
Description of the FRV	River corridor activities include canoeing, kayaking, boating, tubing, rafting, SCUBA diving, snorkeling, swimming, hunting waterfowl, and year-round world class fishing (guided or independent). Other recreational activities include photography, wildlife viewing, birdwatching, picnicking, trapping and hunting for both small and large game, bicycle touring, hiking, and cross-country skiing. Sightseeing opportunities can be found at numer scenic overlooks. Auto and motorcycle touring and bicycling are popular along the Upper Delaware Scenic Byway (New York State Route 97), which concurrently includes New York State Bicycle Route 17 and connects to Pennsylvania Bicycle Route Y. Camping at primitive and developed commercial campgrounds, fall foliage viewing, antiquing, community festive ziplining, sporting activities, geocaching, scientific research, education activities, and rangel led activities are also popular. Eagle watching is particularly popular in the Lackawaxen area during the winter months.					
Current Conditions	 Existing river access points owned by partner agencies are in need of repair and rehabilitation, the result of aging infrastructure. Improvements to current river access points are needed to meet visitor demand. Callicoon needs a new public access because of man-made channeling. Publicly owned accesses in the northern portion of the corridor outnumber those in the southern portion. Commercially owned accesses are prolific in the southern portion, though sparse in the northern portion. There are more anglers in the northern portion than the southern portion. Most of the access points are for carry-in boat access, and there are a few motor boat launches. The private liveries generally have their own access points. The NPS is currently partnering with the Local Waterfront Revitalization Program and Sullivan County Visitors Association. Commercial use authorizations are used to manage guided fishing activities and commercial boat rental businesses. The NPS partners to promote sustainable economic development of the community. There are sometimes conflicts between private landowners and river users, and conflicts between different types of use, e.g., fishing vs. boating (especially motorized kayaks). 					
Trends	 Visitors often trespass on private land. There appears to be increasing use of the access points. Resource damage such as exposed roots increases as visitors spread out over the existing access points. There has been an increase in fishing guide business, particularly in the northern portion of the river, which may require more access points for trailer-launch boats. There has been an increase in marketing for recreation and visitation, especially on the New York side, and in Pike County, Pennsylvania. Use of motorized kayaks (which have a small jet motor and are not considered personalized watercraft) could potentially increase. There has been a marked increase in motorcycling in the area. 					
Threats	 The majority of drowning incidents are swimming-based. When users of the river access points are not being good neighbors (e.g., being loud, blocking private driveways, etc.), it threatens the relationships with the communities in which those access points are located. The increase in motorized transportation users impacts the soundscape. Some private commercial campgrounds are loud with music and fireworks late into the night. 					

Fundamental Resource or Value	Recreational					
Opportunities	 Provide additional restroom facilities at more points along the river. Promote tourism and ecotourism by increasing awareness of the Upper Delaware Scenic and Recreational River through state visitor bureaus. Improve the Corwin Farm site to establish a carry-in visitor access point. Develop an area(s) with public swimming allowed. Work with land trusts to protect sensitive areas through easements and other incentives. Improve infrastructure for cyclists, such as hiking/biking trails, and New York State Bicycle Route 17 and Pennsylvania Bicycle Route Y. Improve/increase partnering with tourism boards and other partners to promote sustainable recreation. Review the Delaware Water Trail initiatives for possible designation. Support initiatives designed to protect the watershed. Assist the Upper Delaware Scenic Byway (New York State Route 97 and Pennsylvania Bicycle Route Y) to move forward in its initiative, e.g., restore the vistas, create or restore pull-offs and other amenities, etc., to implement the Scenic Byway Plan. Set up GPS earth caches (geologic features) or virtual caches within the corridor. Reinstitute the partnership with Pocono Mountain Vacation Bureau. Develop multilingual interpretive signage and hire multilingual rangers. Continue to work with the railroad to promote ways to use their land, (e.g., wilderness camping, a linear trail on their right-of-way) starting with the once-per-year event currently offered by the railroad. Collaborate with partners to develop a strategy to reduce trash throughout the corridor, including the Upper Delaware Scenic Byway. Explore opportunities to offer additional visitor contact facilities in the river corridor. Continue to support the water safety campaign, encouraging safe river use and life jacket wear. 					
Existing Data and Plans Related to the FRV	 Visitor use survey. Final River Management Plan for the Upper Delaware Scenic and Recreational River (1986) Land and Water Use Guidelines. Life jacket study data. Incident Management, Analysis, and Reporting System (case incident reporting system). GIS data regarding drowning. Technical specialist report of the outstandingly remarkable values document. 					
Data and/or GIS Needs	 Baseline land use data. Issues database/clearinghouse. Visitor capacity study. Trail feasibility study. Expanded visitor counting program. Visitor use survey. Study for sustainable rural economy. 					
Planning Needs	 Visitor use management plan. Marketing strategy. Partnering strategy ("friends" group). 					

Fundamental Resource or Value	Recreational						
Laws and Policies That Apply to the FRV, and NPS Policy-level Guidance	 Laws and Policies That Apply to the FRV Americans with Disabilities Act (ADA) / Architectural Barriers Act (ABA) Wild and Scenic Rivers Act Final River Management Plan for the Upper Delaware Scenic and Recreational River (1986) An Enhancement Concept for the Upper Delaware Scenic Byway (2002) Local Waterfront Revitalization Program for the Upper Delaware Corridor in New York Land and Water Use Guidelines NPS Policy-level Guidance NPS Management Policies 2006 (chapter 2) Director's Order 6: Interpretation and Education Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-making Director's Order 17: National Park Service Tourism Director's Order 42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services Director's Order 46: Wild and Scenic Rivers Director's Order 48B: Commercial Use Authorizations Director's Order 50C: Public Risk Management Program Director's Order 78: Social Science Friends of Yosemite v. Kempthorne opinion 3/27/2008 (Merced WSR ruling) American Whitewater v. USFS opinion 4/16/2013 (Chattooga WSR ruling) 						



Fundamental Resource and Value	Scenic					
Description of the FRV	The scenic quality of the Upper Delaware River is characterized by its picturesque gorge, riparian vegetation, steep forested slopes, and gently rolling hills. The agricultural fields and livestock pastures add variety to this tranquil scene, along with rock outcroppings, cliff faces, and exposed unusual sedimentary formations. Charming rural communities' architecture also contributes to the stimulating visual variety of the Upper Delaware.					
Current Conditions	 Many communities along the Upper Delaware Scenic Byway and the river have nonconforming signs and billboards that detract from the scenery. There is graffiti on the stone walls and discarded trash over the edge of Hawk's Nest. Informal parking areas are expanding at Hawk's Nest where cell phone reception is available. There is a state-owned hiking trail at Jensens Ledges. The road to the quarry on the Pennsylvania side of the river detracts from the scenic view at Jensens Ledges. Proliferation of communication towers in the corridor may impair scenic values. Cochecton Station has been relocated from Cochecton Mills to its present location along New York State Route 97. The town of Tusten is planning to develop a riverside esplanade at the Big Eddy in the hamlet of Narrowsburg, New York. The historic towns, canals, and farms contribute to the scenic quality. Dark night skies contribute to the scenic quality. Scenic Byway/Route 97/Bicycle Route 17 infrastructure is deteriorating. Vegetation overgrowth along the byway has all but eliminated historic vistas and views of the river from the byway. Commercials are sometimes filmed at Hawk's Nest because of the scenic roadway quality. Trash cleanup in and along the river is performed by liveries, staff, and volunteers. Provision for a trash cleanup program is provided in the legislation. 					
Trends	 Indiscriminate disposal of trash is an issue throughout the river corridor, particularly along the byway and at river accesses. There is community resistance to increased traffic at Jensens Ledges. 					
Threats	 Overgrown vegetation along the byway, including at Hawk's Nest, obstructs views. There is development pressure on property adjacent to Hawk's Nest and throughout the river corridor that could lead to visual intrusions on the landscape if the land is developed. Corridorwide trash dumping, especially at places such as Hawk's Nest, along the byway, at Peggy Runway, and at Skinners Falls, is a threat to the scenic quality of the area. If development changes on non-NPS land in the area around the Roebling Bridge, the historic scenery could be lost. Gas drilling infrastructure would degrade scenic value. If pipelines are built, deforestation would damage the viewsheds. Lights on developmental and industrial infrastructure would impair the dark night skies. Buildings, both residential and businesses, in need of repair can impair the scenic quality of some hamlets and towns. 					

Fundamental Resource and Value	Scenic					
	 Signage along the Upper Delaware Scenic Byway could be improved to better direct visitors to businesses, accesses, restrooms, and overlooks. Interpretive signage could be installed at pullouts, including at Hawk's Nest. 					
	Cleanup of the trash at Hawk's Nest could be organized through collaboration with the township or state (the NPS only has access to the bottom of the cliffs via boat).					
	 Cleanup of trash along the byway could be organized in collaboration with the byway committee, New York State Department of Transportation, and the townships. 					
	Cooperate with the state to improve and promote the hiking trail at Jensens Ledges. NPS staff could host guided hikes.					
Opportunities	Work with local governments to ensure that zoning ordinances keep the architecture within the predominant style and protect the historic character of the area.					
	Work with local governments to establish zoning that substantially conforms to the Land and Water Use Guidelines, preserves the undeveloped (scenic) sections of the river (Lordville to Callicoon; Narrowsburg to Highland), and keeps them free from roadways and railroads.					
	Promote funding to purchase scenic easements from landowners.					
	Work with partners to identify cell tower locations that provide cell coverage without impacting the viewshed.					
	Encourage co-location of cell towers to reduce impacts to the viewsheds.					
	Work with the state and the byway committee to encourage keeping the road beautiful and improving and maintaining the overlooks.					
	Upper Delaware Scenic Byway Corridor Scenic Enhancement Plan.					
	Historic structure inventory.					
	Upper Delaware River Management Plan.					
	Local Waterfront Revitalization Plan.					
Existing Data and Plans	Delaware River Water Trail Plan.					
Related to the FRV	Five counties' comprehensive plans.					
	Fifteen townships' comprehensive plans.					
	DRBC comprehensive plan.					
	New York and Pennsylvania comprehensive plans.					
	Technical specialist report of the outstandingly remarkable values document.					
	Baseline land use data.					
	Issues database/clearinghouse.					
Data and/or GIS Needs	Viewshed inventory.					
Data dila/or dis Necas	Air quality baseline data and monitoring.					
	Night skies baseline and monitoring.					
	Study for sustainable rural economy.					
	Update development concept plan for Roebling Bridge.					
Planning Needs	River management plan addendum.					
	Partnering strategy ("friends" group).					
	Laws and Policies That Apply to the FRV					
	Wild and Scenic Rivers Act					
Laws and Polisies That	• State emissions controls					
Laws and Policies That Apply to the FRV, and NPS	Clean Air Act of 1963, as amended (42 USC 7401 et seq.) Final Bit and Bit an					
Policy-level Guidance	Final River Management Plan for the Upper Delaware Scenic and Recreational River (1986) Land and Wester Has Guidelines					
	Land and Water Use Guidelines					
	NPS Policy-level Guidance					
	Director's Order 47: Soundscape Preservation and Noise Management					

Appendix B: Enabling Legislation and Legislative Acts for Upper Delaware Scenic and Recreational River

ADDITION OF UPPER DELAWARE SEGMENT; SPECIAL PROVISIONS

Sec. 704. (a) Section 3(a) of the Wild and Scenic Rivers Act is amended by adding the following new paragraph at the end thereof: "(19) UPPER DELAWARE RIVER, NEW YORK AND PENNSYLVANIA.-The segment of the Upper Delaware River from the confluence of the East and West branches below Hancock, New York, to the existing railroad bridge immediately downstream of Cherry Island in the vicinity of Sparrow Bush, New York, as depicted on the boundary map entitled 'The Upper Delaware Scenic and Recreational River', dated April 1978; to be administered by the Secretary of the Interior. Subsection (b) of this section shall not apply, and the boundaries and classifications of the river shall be as specified on the map referred to in the preceding sentence, except to the extent that such boundaries or classifications are modified pursuant to section 705(c) of the National Parks and Recreation Act of 1978. Such boundaries and classifications shall be published in the Federal Register and shall not become effective until ninety days after they have been forwarded to the Committee on Interior and Insular Affairs of the United States House of Representatives and the Committee on Energy and Natural Resources of the United States Senate. For purposes of carrying out the provisions of this Act with respect to the river designated by this paragraph there are authorized to be appropriated such sums as may be necessary.".

(b) (1) Notwithstanding any requirement to the contrary contained in section 6(c) of the Wild and Scenic Rivers Act, within one hundred and eighty days after the date of enactment of this Act, the Secretary shall publish in the Federal Register general guidelines for land and

Boundaries. 16 USC 1274.

Publication in Federal Register.

Appropriation authorization.

Guidelines, publication in Federal Register. 16 USC 1274 note. 16 USC 1277.

92 STAT. 3524

PUBLIC LAW 95-625-NOV. 10, 1978

Participation.

Public hearings.

water use control measures to be developed and implemented by the appropriate officials of the States of New York and Pennsylvania (hereinafter referred to as the "directly affected States"), by the local political subdivisions, and by the Delaware River Basin Commission (hereinafter referred to as the "Commission"). The Secretary shall provide for participation in the development of the said general guidelines by all levels of State, county, and local government, and concerned private individuals and organizations, and also shall seek the advice of the Upper Delaware Citizens Advisory Council established in subsection (f) (hereinafter referred to as the "Advisory Council"). In each of the directly affected States, prior to publication of such general guidelines, public hearings shall be conducted by the Secretary or his designee, in the region of the Upper Delaware River designated by subsection (a) (hereinafter in this section referred to as the "Upper Delaware River").

(2) The Secretary may from time to time adopt amended or revised guidelines and shall do so in accordance with the provisions of para-

graph (1) hereof.

Management plan, submittal to State Governors. 16 USC 1274 note. (c) (1) Within three years from the date of the enactment of this Act, the Secretary, in cooperation with the Commission, the Advisory Council, the directly affected States and their concerned political subdivisions and other concerned Federal agencies, shall develop, approve, and submit to the Governors of the directly affected States a management plan (hereinafter in this section referred to as the "management plan" or "the plan") for the Upper Delaware River which shall provide for as broad a range of land and water uses and scenic and recreational activities as shall be compatible with the provisions of this section, the Wild and Scenic Rivers Act, and the general guidelines for land and water use controls promulgated by the Secretary under the provisions of subsection (b).

(2) The plan shall apply to the Upper Delaware River and shall set

forth—

(A) a map showing detailed final landward boundaries, and upper and lower termini of the area and the specific segments of the river classified as scenic and recreational, to be administered in accordance with such classifications;

(B) a program for management of existing and future land and water use, including the application of available management

techniques;

(C) an analysis of the economic and environmental costs and benefits of implementing the management plan including any impact of the plan upon revenues and costs of local government;

(D) a program providing for coordinated implementation and administration of the plan with proposed assignment of responsibilities to the appropriate governmental unit at the Federal, regional, State, and local levels; and

(E) such other recommendations or provisions as shall be deemed appropriate to carry out the purposes of this section.

(3) Immediately following enactment of this Act, the Secretary, through the National Park Service or such other designee, shall develop and implement such interim programs as he shall deem necessary and appropriate to protect the Upper Delaware River and its environs and to protect the public health and safety. Such interim programs shall include provisions for information to river users, education and interpretation activities, and regulation of recreational use

of the river.

16 USC 1271 note.

Map.

Analysis.

Interim programs.

PUBLIC LAW 95-625-NOV. 10, 1978

92 STAT. 3525

(4) To enable the directly affected States and their political subdi- Technical visions to develop and implement programs compatible with the management plan, the Secretary shall provide such technical assistance to the said States and their political subdivisions as he deems appropriate.

(5) The Secretary shall promote public awareness of and participation in the development of the management plan, and shall develop and conduct a concerted program to this end. Prior to final approval of the management plan, the Secretary shall hold two or more public hearings in the Upper Delaware River region of each directly affected

(6) Upon approval of the management plan by the Secretary, it Publication in shall be published in the Federal Register and shall not become effective until ninety days after it shall have been forwarded to the Committee on Interior and Insular Affairs of the United States House of Representatives and the Committee on Energy and Natural Resources of the United States Senate. The plan shall be administered by the Secretary in accordance with the provisions of this section and the Wild and Scenic Rivers Act. The Secretary is hereby granted such authority as may be required to implement and administer said plan.

(d) Notwithstanding any provision of the Wild and Scenic Rivers Act, the Secretary may not acquire more than a total of four hundred and fifty acres of land and interests in land for access, development sites, the preservation of scenic qualities, or for any other purposes: *Provided*, That the Secretary may acquire additional land and interests in land for such purposes not in excess of one thousand acres if such additional acquisition is recommended and provided for in the management plan as finally approved by the Secretary. The limitations contained in this section shall not apply under the circumstances set forth in subsection (e) (4) of this section. Prior to acquisition of any land or interests in land which has been used for business purposes during the annual period immediately preceding the date of the enactment of this Act, the Secretary shall first make such efforts as he deems reasonable to acquire easements or restrictive covenants, or to enter into any other appropriate agreements or arrangements with the owners of said land, consistent with the purposes of this section.

(e) (1) For the purpose of protecting the integrity of the Upper Delaware River, the Secretary shall review all relevant local plans, laws, and ordinances to determine whether they substantially conform to the approved management plan provided for in subsection (c) and to the general guidelines promulgated by the Secretary pursuant to subsection (b). Additionally, the Secretary shall determine the adequacy of enforcement of such plans, laws, and ordinances, including but not limited to review of building permits and zoning variances granted by local governments, and amendments to local laws and ordinances.

(2) The purpose of such reviews shall be to determine the degree to which actions by local governments are compatible with the purposes of this section. Following the approval of the management plan and after a reasonable period of time has elapsed, but not less than two years, upon a finding by the Secretary that such plans, laws, and ordinances are nonexistent, are otherwise not in conformance with the management plan or guidelines, or are not being enforced in such manner as will carry out the purposes of this section (as determined by the Secretary), the Secretary may exercise the authority available to him under the provisions of paragraph (4) hereof.

Public hearings.

Federal Register.

Administration.

Laud and interests, acquisition. 16 USC 1274

Local plans, laws, and ordinances, conformity, review.

Determination.

92 STAT. 3526

PUBLIC LAW 95-625—NOV. 10, 1978

Professional services, contracts.

Notification.

Lands and interests. acquisition.

16 USC 1277.

Post, p. 3528.

Upper Delaware Citizens Advisory Council. Establishment. 16 USC 1274 note. Reports.

Membership.

(3) To facilitate administration of this section, the Secretary may contract with the directly affected States or their political subdivisions to provide, on behalf of the Secretary, professional services necessary for the review of relevant local plans, laws, and ordinances, and of amendments thereto and variances therefrom, and for the monitoring of the enforcement thereof by local governments having jurisdiction over any area in the region to which the management plan applies. The Secretary shall notify the appropriate State or local officials as to the results of his review under this section within forty-five days from the date he receives notice of the local government action.

(4) In those sections of the Upper Delaware River where such local plans, laws, and ordinances, or amendments thereto or variances therefrom, are found by the Secretary not to be in conformance with the guidelines or the management plan promulgated pursuant to subsections (b) and (c) of this section, respectively, or are not being enforced in such manner as will carry out the purposes of this section (as determined by the Secretary), the Secretary is hereby authorized to acquire land or interests in land in excess of the acreage provided for in subsection (d) of this section. Land and interests in land acquired pursuant to this subsection shall be restricted to the geographical area of the local governmental unit failing to conform with the said guidelines or management plan, and shall be limited to those lands clearly and directly required, in the judgment of the Secretary, for protection of the objectives of this Act. The total acreage of land and interests in land acquired pursuant to this subsection shall not in any event exceed the limitations contained in section 6(a) of the Wild and Scenic Rivers Act. This subsection shall apply notwithstanding the first sentence of section 6(c) of the Wild and Scenic Rivers Act. Notwithstanding any limitation on amounts authorized to be appropriated for acquisition of land and interests in land which is contained in section 3(a)(21) of the Wild and Scenic Rivers Act or in any other provision of law, there are authorized to be appropriated such sums as may be necessary to carry out this subsection.

(f) (1) At the earliest practicable date following enactment of this Act, but no later than one hundred and twenty days thereafter, there shall be established an Upper Delaware Citizens Advisory Council. The Advisory Council shall encourage maximum public involvement in the development and implementation of the plans and programs authorized by this section. It shall report to the Commission and the Secretary from time to time during preparation of the management plan. Following completion of the management plan, it shall report to the Secretary and the Governors of the directly affected States no less frequently than once each year its recommendations, if any, for improvement in the programs authorized by this Act, or in the programs of other agencies which may relate to land or water use in the Upper Delaware River region.

(2) Membership on the Advisory Council shall consist of seventeen

members appointed as follows: there shall be-

(A) six members from each of the directly affected States appointed by the Secretary from nominations submitted by the legislatures of the respective counties and appointed such that two members shall be from each of Orange, Delaware, and Sullivan Counties, New York, and three members shall be from each of Wayne and Pike Counties, Pennsylvania (at lease one appointee from each county shall be a permanent resident of a municipality abutting the Upper Delaware River);

(B) two members appointed at large by each Governor of a directly affected State; and

(C) one member appointed by the Secretary. The Secretary shall designate one of the aforesaid members to serve as Chairperson of the Advisory Council who shall be a permanent resident of one of the aforementioned counties. Vacancies on the Advisory Council shall be filled in the same manner in which the original appointment was made. Members of the Advisory Council shall serve without compensation as such, but the Secretary is authorized to pay expenses reasonably incurred by the Advisory Council in carrying out its responsibilities under this Act on vouchers signed by the Chairman.

(g) With respect to the land and water in areas which are not owned by the United States but which are within the boundaries of the segment of the Delaware River designated as a wild and scenic river under subsection (a), the Secretary is authorized to enter into contracts with the appropriate State or political subdivisions thereof pursuant to which the Secretary may provide financial assistance to such State or political subdivision for purposes of-

(1) enforcing State and local laws in such areas, and

(2) removing solid waste from such areas and disposing of such waste.

(h) Nothing in this section shall be construed as limiting the right 16 USC 1274 to fish and hunt on any of the lands or waters within the boundaries of the Upper Delaware River in the manner provided in section 13 of the Wild and Scenic Rivers Act.

(i) There are hereby authorized to be appropriated to carry out the

purposes of this section such sums as may be necessary.

(j) Where any provision of the Wild and Scenic Rivers Act is inconsistent with any provisions of this section, the provision of this section shall govern. In applying the provisions of section 6(g)(3) of the Wild and Scenic Rivers Act, with regard to "improved property", the date specified therein, shall, for purposes of the river designated in this Act, be the date of enactment of this Act (rather than January 1, 1967).

Chairperson.

Compensation.

Contracts. 16 USC 1274 note.

16 USC 1284. Appropriation authorization. 16 USC 1274 note. 16 USC 1274 note. 16 USC 1277.

93 STAT. 666

92 Stat. 3523. 16 USC 1274. 16 USC 1274 note.

PUBLIC LAW 96-87--OCT. 12, 1979

(p) Section 704, re: Upper Delaware River, is amended (1) in subsection (a) by changing "705(c)" to "704(c)"; and (2) in subsection (f)(1) by inserting the following sentence at the end thereof: "The Advisory Council shall terminate ten years after the date on which it is established.".

102 STAT. 1100

PUBLIC LAW 100-412-AUG. 22, 1988

Public Law 100-412 100th Congress

An Act

Aug. 22, 1988 [H.R. 3880]

To extend the authorization of the Upper Delaware Citizens Advisory Council for an additional ten years.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. EXTENSION OF AUTHORIZATION.

The last sentence of paragraph (1) of section 704(f) of the National Parks and Recreation Act of 1978 (16 U.S.C. 1274 note; relating to the Upper Delaware River) is amended by striking out "ten" and inserting in lieu thereof "20".

Approved August 22, 1988.

Public Law 106–119 106th Congress

An Act

Dec. 3, 1999 [H.R. 20] To authorize the Secretary of the Interior to construct and operate a visitor center for the Upper Delaware Scenic and Recreational River on land owned by the State of New York.

Upper Delaware Scenic and Recreational River Mongaup Visitor Center Act of 1999. 16 USC 1274 note. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Upper Delaware Scenic and Recreational River Mongaup Visitor Center Act of 1999".

SEC. 2. FINDINGS.

The Congress finds the following:

(1) The Secretary of the Interior approved a management plan for the Upper Delaware Scenic and Recreational River, as required by section 704 of Public Law 95–625 (16 U.S.C. 1274 note), on September 29, 1987.

(2) The river management plan called for the development of a primary visitor contact facility located at the southern

end of the river corridor.

(3) The river management plan determined that the visitor center would be built and operated by the National Park Service.

(4) The Act that designated the Upper Delaware Scenic and Recreational River and the approved river management plan limits the Secretary of the Interior's authority to acquire

land within the boundary of the river corridor.

(5) The State of New York authorized on June 21, 1993, a 99-year lease between the New York State Department of Environmental Conservation and the National Park Service for the construction and operation of a visitor center by the Federal Government on State-owned land in the Town of Deerpark, Orange County, New York, in the vicinity of Mongaup, which is the preferred site for the visitor center.

SEC. 3. AUTHORIZATION OF VISITOR CENTER FOR UPPER DELAWARE SCENIC AND RECREATIONAL RIVER.

For the purpose of constructing and operating a visitor center for the Upper Delaware Scenic and Recreational River and subject to the availability of appropriations, the Secretary of the Interior may—

- (1) enter into a lease with the State of New York, for a term of 99 years, for State-owned land within the boundaries of the Upper Delaware Scenic and Recreational River located at an area known as Mongaup near the confluence of the Mongaup and Upper Delaware Rivers in the State of New York; and
- (2) construct and operate such a visitor center on land leased under paragraph (2).

Approved December 3, 1999.

Wild & Scenic Rivers Act

An Act1

To provide for a National Wild and Scenic Rivers System, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that

SECTION 1.

- (a) This Act may be cited as the "Wild and Scenic Rivers Act."
- **(b)** 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 Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.
- (c) The purpose of this Act is to implement this policy by instituting a national wild and scenic rivers system, by designating the initial components of that system, and by prescribing the methods by which and standards according to which additional components may be added to the system from time to time.

SECTION 2.

- (a) The national wild and scenic rivers system shall comprise rivers
 - (i) that are authorized for inclusion therein by Act of Congress, or
 - (ii) that are designated as wild, scenic or recreational rivers by or pursuant to an act of the legislature of the State or States through which they flow, that are to be permanently

administered as wild, scenic or recreational rivers by an agency or political subdivision of the State or States concerned, that are found by the Secretary of the Interior, upon application of the Governor of the State or the Governors of the States concerned, or a person or persons thereunto duly appointed by him or them, to meet the criteria established in this Act and such criteria supplementary thereto as he may prescribe, and that are approved by him for inclusion in the system, including, upon application of the Governor of the State concerned, the Allagash Wilderness Waterway, Maine; that segment of the Wolf River, Wisconsin, which flows through Langlade County and that segment of the New River in North Carolina extending from its confluence with Dog Creek downstream approximately 26.5 miles to the Virginia State line.

Upon receipt of an application under clause (ii) of this subsection, the Secretary shall notify the Federal Energy Regulatory Commission and publish such application in the Federal Register. Each river designated under clause (ii) shall be administered by the State or political subdivision thereof without expense to the United States other than for administration and management of federally owned lands. For purposes of the preceding sentence, amounts made available to any State or political subdivision under the Land and Water Conservation [Fund] Act of 1965 or any other provision of law shall not be treated as an expense to the United States. Nothing in this subsection shall be construed to provide for the transfer to, or administration by, a State or local authority of any federally owned lands which are within the boundaries of any river included within the system under clause (ii).

- **(b)** A wild, scenic or recreational river area eligible to be included in the system is a free-flowing stream and the related adjacent land area that possesses one or more of the values referred to in Section 1, subsection (b) of this Act. 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.

SECTION 3.

(a) The following rivers and the land adjacent thereto are hereby designated as components of the national wild and scenic rivers system:

[List of designated rivers omitted. Please see following list.]

- (b) The agency charged with the administration of each component of the national wild and scenic rivers system designated by subsection (a) of this section shall, within one year from the date of designation of such component under subsection (a) (except where a different date is provided in subsection (a)), establish detailed boundaries therefore (which boundaries shall include an average of not more than 320 acres of land per mile measured from the ordinary high water mark on both sides of the river); and determine which of the classes outlined in section 2, subsection (b), of this Act best fit the river or its various segments. Notice of the availability of the boundaries and classification, and of subsequent boundary amendments shall be published in the Federal Register and shall not become effective until ninety days after they have been forwarded to the President of the Senate and the Speaker of the House of Representatives.
- **(c)** Maps of all boundaries and descriptions of the classifications of designated river segments, and subsequent amendments to such boundaries, shall be available for public inspection in the offices of the administering agency in the District of Columbia and in locations convenient to the designated river.
- (d) (1) For rivers designated on or after January 1, 1986, the Federal agency charged with the administration of each component of the National Wild and Scenic Rivers System shall prepare a comprehensive management plan for such river segment to provide for the protection of the river values. The plan shall address resource protection, development of lands and facilities, user capacities, and other management practices necessary or desirable to achieve the purposes of this Act. The plan shall be coordinated with and may be incorporated into resource management planning for affected adjacent Federal lands. The plan shall be prepared, after consultation with State and local governments and the interested public within 3 full fiscal years after the date of designation. Notice of the completion and availability of such plans shall be published in the Federal Register.
 - (2) For rivers designated before January 1, 1986, all boundaries, classifications, and plans shall be reviewed for conformity within the requirements of this subsection within 10 years through regular agency planning processes.

SECTION 4.

- (a) The Secretary of the Interior or, where national forest lands are involved, the Secretary of Agriculture or, in appropriate cases, the two Secretaries jointly shall study and submit to the President reports on the suitability or nonsuitability for addition to the national wild and scenic rivers system of rivers which are designated herein or hereafter by the Congress as potential additions to such system. The President shall report to the Congress his recommendations and proposals with respect to the designation of each such river or section thereof under this Act. Such studies shall be completed and such reports shall be made to the Congress with respect to all rivers named in subparagraphs 5(a) (1) through (27) of this Act no later than October 2, 1978. In conducting these studies the Secretary of the Interior and the Secretary of Agriculture shall give priority to those rivers
 - (i) with respect to which there is the greatest likelihood of developments which, if undertaken, would render the rivers unsuitable for inclusion in the national wild and scenic rivers system, and
 - (ii) which possess the greatest proportion of private lands within their areas. Every such study and plan shall be coordinated with any water resources planning involving the same river which is being conducted pursuant to the Water Resources Planning Act (79 Stat. 244; 42 U.S.C. 1962 et seq.). Each report, including maps and illustrations, shall show among other things the area included within the report; the characteristics which do or do not make the area a worthy addition to the system; the current status of land ownership 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 (which in the case of a river which is wholly or substantially within a national forest, shall be the Department of Agriculture) 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. Each such report shall be printed as a Senate or House document.
- **(b)** Before submitting any such report to the President and the Congress, copies of the proposed report shall, unless it was prepared jointly by the Secretary of the Interior and the Secretary of Agriculture, be submitted by the Secretary of the Interior to the Secretary of Agriculture or by the Secretary of Agriculture to the Secretary of the Interior, as the case may be, and to the Secretary of the Army, the Chairman of the Federal Power Commission, the head of any other affected Federal department or agency and, unless the lands proposed to be included in the area are already owned by the United States or have already been

authorized for acquisition by Act of Congress, the Governor of the State or States in which they are located or an officer designated by the Governor to receive the same. Any recommendations or comments on the proposal which the said officials furnish the Secretary or Secretaries who prepared the report within ninety days of the date on which the report is submitted to them, together with the Secretary's or Secretaries' comments thereon, shall be included with the transmittal to the President and the Congress.

- (c) Before approving or disapproving for inclusion in the national wild and scenic rivers system any river designated as a wild, scenic or recreational river by or pursuant to an act of the State legislature, the Secretary of the Interior shall submit the proposal to the Secretary of Agriculture, the Secretary of the Army, the Chairman of the Federal Power Commission, and the head of any other affected Federal department or agency and shall evaluate and give due weight to any recommendations or comments which the said officials furnish him within ninety days of the date on which it is submitted to them. If he approves the proposed inclusion, he shall publish notice thereof in the Federal Register.
- (d) The boundaries of any river proposed in section 5(a) of this Act for potential addition to the National Wild and Scenic Rivers System shall generally comprise that area measured within one-quarter mile from the ordinary high water mark on each side of the river. In the case of any designated river, prior to publication of boundaries pursuant to section 3(b) of this Act, the boundaries also shall comprise the same area. This subsection shall not be construed to limit the possible scope of the study report to address areas which may lie more than one-quarter mile from the ordinary high water mark on each side of the river.

SECTION 5.

(a) The following rivers are hereby designated for potential addition to the national wild and scenic rivers system:

[List of study rivers and study periods is omitted. If you need the list, please contact a Council member.]

(c) The study of any of said rivers shall be pursued in as close cooperation with appropriate agencies of the affected State and its political subdivisions as possible, shall be carried on jointly with such agencies if request for such joint study is made by the State, and shall include a determination of the degree to which the State or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the national wild and scenic rivers system.

- (d) (1) 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 potentials. 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.
 - (2) The Congress finds that the Secretary of the Interior, in preparing the Nationwide Rivers Inventory as a specific study for possible additions to the National Wild and Scenic Rivers System, identified the Upper Klamath River from below the John Boyle Dam to the Oregon-California State line. The Secretary, acting through the Bureau of Land Management, is authorized under this subsection to complete a study of the eligibility and suitability of such segment for potential addition to the National Wild and Scenic Rivers System. Such study shall be completed, and a report containing the results of the study shall be submitted to Congress by April 1, 1990. Nothing in this paragraph shall affect the authority or responsibilities of any other Federal agency with respect to activities or action on this segment and its immediate environment.

SECTION 6.

- (a) (1) The Secretary of the Interior and the Secretary of Agriculture are each authorized to acquire lands and interests in land within the authorized boundaries of any component of the national wild and scenic rivers system designated in section 3 of this Act, or hereafter designated for inclusion in the system by Act of Congress, which is administered by him, but he shall not acquire fee title to an average of more than 100 acres per mile on both sides of the river. Lands owned by a State may be acquired only by donation or by exchange in accordance with the subsection (d) of this section. Lands owned by an Indian tribe or a political subdivision of a State may not be acquired without the consent of the appropriate governing body thereof as long as the Indian tribe or political subdivision is following a plan for management and protection of the lands which the Secretary finds protects the land and assures its use for purposes consistent with this Act. Money appropriated for Federal purposes from the land and water conservation fund shall, without prejudice to the use of appropriations from other sources, be available to Federal departments and agencies for the acquisition of property for the purposes of this Act.
 - (2) When a tract of land lies partially within and partially outside the boundaries of a component of the National Wild and Scenic Rivers System, the appropriate Secretary

may, with the consent of the landowners for the portion outside the boundaries, acquire the entire tract. The land or interest therein so acquired outside the boundaries shall not be counted against the average one-hundred-acre-per-mile fee title limitation of subsection (a)(1). The lands or interests therein outside such boundaries, shall be disposed of, consistent with existing authorities of law, by sale, lease, or exchange.

- **(b)** If 50 per centum or more of the entire acreage outside the ordinary high water mark on both sides of the river within a federally administered wild, scenic or recreational river area is owned in fee title by the United States, by the State or States within which it lies, or by political subdivisions of those States, neither Secretary shall acquire fee title to any lands by condemnation under authority of this Act. Nothing contained in this section, however, shall preclude the use of condemnation when necessary to clear title or to acquire scenic easements or such other easements as are reasonably necessary to give the public access to the river and to permit its members to traverse the length of the area or of selected segments thereof.
- (c) Neither the Secretary of the Interior nor the Secretary of Agriculture may acquire lands by condemnation, for the purpose of including such lands in any national wild, scenic or recreational river area, if such lands are located within any incorporated city, village or borough which has in force and applicable to such lands a duly adopted, valid zoning ordinance that conforms with the purposes of this Act. In order to carry out the provisions of this subsection the appropriate Secretary shall issue guidelines, specifying standards for local zoning ordinances, which are consistent with the purposes of this Act. The standards specified in such guidelines shall have the object of (A) prohibiting new commercial or industrial uses other than commercial or industrial uses which are consistent with the purposes of this Act, and (B) the protection of the bank lands by means of acreage, frontage, and setback requirements on development.
- (d) The appropriate Secretary is authorized to accept title to non-Federal property within the authorized boundaries of any federally administered component of the national wild and scenic rivers system designated in section 3 of this Act or hereafter designated for inclusion in the system by Act of Congress and, in exchange therefore, convey to the grantor any federally owned property which is under his jurisdiction within the State in which the component lies and which he classifies as suitable for exchange or other disposal. The values of the properties so exchanged either shall be approximately equal or, if they are not approximately equal, shall be equalized by the payment of cash to the grantor or to the Secretary as the circumstances require.
- **(e)** The head of any Federal department or agency having administrative jurisdiction over any lands or interests in land within the authorized boundaries of any federally administered component of the national wild and scenic rivers system designated in section 3 of this Act or hereafter designated for inclusion in the system by Act of Congress is authorized to

transfer to the appropriate Secretary jurisdiction over such lands for administration in accordance with the provisions of this Act. Lands acquired by or transferred to the Secretary of Agriculture for the purposes of this Act within or adjacent to a national forest shall upon such acquisition or transfer become national forest lands.

- **(f)** The appropriate Secretary is authorized to accept donations of lands and interests in land, funds, and other property for use in connection with his administration of the national wild and scenic rivers system.
- (g) (1) Any owner or owners (hereinafter in this subsection referred to as "owner") of improved property on the date of its acquisition, may retain for themselves and their successors or assigns a right of use and occupancy of the improved property for noncommercial residential purposes for a definite term not to exceed twenty-five years, or in lieu thereof, for a term ending at the death of the owner, or the death of his spouse, or the death of either or both of them. The owner shall elect the term to be reserved. The appropriate Secretary shall pay to the owner the fair market value of the property on the date of such acquisition less the fair market value on such a date retained by the owner.
 - (2) A right of use and occupancy retained pursuant to this subsection shall be subject to termination whenever the appropriate Secretary is given reasonable cause to find that such use and occupancy is being exercised in a manner which conflicts with the purposes of this Act. In the event of such a finding, the Secretary shall tender to the holder of that right an amount equal to the fair market value of that portion of the right which remains unexpired on the date of termination. Such right of use or occupancy shall terminate by operation of law upon tender of the fair market price.
 - (3) The term "improved property," as used in this Act, means a detached, one-family dwelling (hereinafter referred to as "dwelling"), the construction of which was begun before January 1, 1967, (except where a different date is specifically provided by law with respect to any particular river), together with so much of the land on which the dwelling is situated, the said land being in the same ownership as the dwelling, as the appropriate Secretary shall designate to be reasonably necessary for the enjoyment of the dwelling for the sole purpose of noncommercial residential use, together with any structures accessory to the dwelling which are situated on the land so designated.

SECTION 7.

(a) The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act (41 Stat. 1063), as amended (16 U.S.C. 791a et seq.), on or directly affecting any

river which is designated in section 3 of this Act as a component of the national wild and scenic rivers system or which is hereafter designated for inclusion in that system, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration. Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on the date of designation of a river as a component of the National Wild and Scenic Rivers System. No department or agency of the United States shall recommend authorization of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration, or request appropriations to begin construction of any such project, whether heretofore or hereafter authorized, without advising the Secretary of the Interior or the Secretary of Agriculture, as the case may be, in writing of its intention so to do at least sixty days in advance, and without specifically reporting to the Congress in writing at the time it makes its recommendation or request in what respect construction of such project would be in conflict with the purposes of this Act and would effect the component and the values to be protected by it under this Act. Any license heretofore or hereafter issued by the Federal Power Commission affecting the New River of North Carolina shall continue to be effective only for that portion of the river which is not included in the National Wild and Scenic Rivers System pursuant to section 2 of this Act and no project or undertaking so licensed shall be permitted to invade, inundate or otherwise adversely affect such river segment.

- **(b)** The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, as amended, on or directly affecting any river which is listed in section 5, subsection (a), of this Act, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river might be designated, as determined by the Secretary responsible for its study or approval—
 - (i) during the ten-year period following enactment of this Act or for a three complete fiscal year period following any Act of Congress designating any river for potential addition to the national wild and scenic rivers system, whichever is later, unless, prior to the expiration of the relevant period, the Secretary of the Interior and where national forest lands are involved, the Secretary of Agriculture, on the basis of study, determine that such river should not be included in the national wild and scenic rivers system and notify the Committees on Interior and Insular Affairs of the United States Congress, in writing, including a copy of the study upon which the determination was made, at least

one hundred and eighty days while Congress is in session prior to publishing notice to that effect in the Federal Register: *Provided*, That if any Act designating any river or rivers for potential addition to the national wild and scenic rivers system provides a period for the study or studies which exceeds such three complete fiscal year period the period provided for in such Act shall be substituted for the three complete fiscal year period in the provisions of this clause (i); and

- (ii) during such interim period from the date a report is due and the time a report is actually submitted to the Congress; and
- (iii) during such additional period thereafter as, in the case of any river the report for which is submitted to the President and the Congress for, is necessary for congressional consideration thereof or, in the case of any river recommended to the Secretary of the Interior under section 2(a)(ii) of this Act, is necessary for the secretary's consideration thereof, which additional period, however, shall not exceed three years in the first case and one year in the second.

Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a potential wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or diminish the scenic, recreational, and fish and wildlife values present in the potential wild, scenic or recreational river area on the date of designation of a river for study as provided in section 5 of this Act. No department or agency of the United States shall, during the periods hereinbefore specified, recommend authorization of any water resources project on any such river or request appropriations to begin construction of any such project, whether heretofore or hereafter authorized, without advising the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture in writing of its intention so to do at least sixty days in advance of doing so and without specifically reporting to the Congress in writing at the time it makes its recommendation or request in what respect construction of such project would be in conflict with the purposes of this Act and would affect the component and the values to be protected by it under this Act.

(c) The Federal Power Commission and all other Federal agencies shall, promptly upon enactment of this Act, inform the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture, of any proceedings, studies, or other activities within their jurisdiction which are now in progress and which affect or may affect any of the rivers specified in section 5, subsection (a), of this Act. They shall likewise inform him of any such proceedings, studies, or other activities which are hereafter commenced or resumed before they are commenced or resumed.

(d) Nothing in this section with respect to the making of a loan or grant shall apply to grants made under the Land and Water Conservation Fund Act of 1965 (78 Stat. 897; 16 U.S.C. 4601-5 et seq.).

SECTION 8.

- (a) All public lands within the authorized boundaries of any component of the national wild and scenic rivers system which is designated in section 3 of this Act or which is hereafter designated for inclusion in that system are hereby withdrawn from entry, sale, or other disposition under the public land laws of the United States. This subsection shall not be construed to limit the authorities granted in section 6(d) or section 14A of this Act.
- **(b)** All public lands which constitute the bed or bank, or are within one-quarter mile of the bank, of any river which is listed in section 5, subsection (a), of this Act are hereby withdrawn from entry, sale, or other disposition under the public land laws of the United States for the periods specified in section 7, subsection (b), of this Act. Notwithstanding the foregoing provisions of this subsection or any other provision of this Act, subject only to valid existing rights, including valid Native selection rights under the Alaska Native Claims Settlement Act, all public lands which constitute the bed or bank, or are within an area extending two miles from the bank of the river channel on both sides of the river segments referred to in paragraphs (77) through (88) of section 5(a) are hereby withdrawn from entry, sale, State selection or other disposition under the public land laws of the Unites States for the periods specified in section 7(b) of this Act.

SECTION 9.

- (a) Nothing in this Act shall affect the applicability of the United States mining and mineral leasing laws within components of the national wild and scenic rivers system except that
 - (i) all prospecting, mining operations, and other activities on mining claims which, in the case of a component of the system designated in section 3 of this Act, have not heretofore been perfected or which, in the case of a component hereafter designated pursuant to this Act or any other Act of Congress, are not perfected before its inclusion in the system and all mining operations and other activities under a mineral lease, license, or permit issued or renewed after inclusion of a component in the system shall be subject to such regulations as the Secretary of the Interior or, in the case of national forest lands, the Secretary of Agriculture may prescribe to effectuate the purposes of this Act;

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- (ii) subject to valid existing rights, the perfection of, or issuance of a patent to, any mining claim affecting lands within the system shall confer or convey a right or title only to the mineral deposits and such rights only to the use of the surface and the surface resources as are reasonably required to carrying on prospecting or mining operations and are consistent with such regulations as may be prescribed by the Secretary of the Interior, or in the case of national forest lands, by the Secretary of Agriculture; and
- (iii) subject to valid existing rights, the minerals in Federal lands which are part of the system and constitute the bed or bank or are situated within one-quarter mile of the bank of any river designated a wild river under this Act or any subsequent Act are hereby withdrawn from all forms of appropriation under the mining laws and from operation of the mineral leasing laws including, in both cases, amendments thereto.

Regulations issued pursuant to paragraphs (i) and (ii) of this subsection shall, among other things, provide safeguards against pollution of the river involved and unnecessary impairment of the scenery within the components in question.

(b) The minerals in any Federal lands which constitute the bed or bank or are situated within one-quarter mile of the bank of any river which is listed in section 5, subsection (a) of this Act are hereby withdrawn from all forms of appropriation under the mining laws during the periods specified in section 7, subsection (b) of this Act. Nothing contained in this subsection shall be construed to forbid prospecting or the issuance of leases, licenses, and permits under the mineral leasing laws subject to such conditions as the Secretary of the Interior and, in the case of national forest lands, the Secretary of Agriculture find appropriate to safeguard the area in the event it is subsequently included in the system. Notwithstanding the foregoing provisions of this subsection or any other provision of this Act, all public lands which constitute the bed or bank, or are within an area extending two miles from the bank of the river channel on both sides of the river segments referred to in paragraphs (77) through (88) of section 5(a), are hereby withdrawn, subject to valid existing rights, from all forms of appropriation under the mining laws and from operation of the mineral leasing laws including, in both cases, amendments thereto, during the periods specified in section 7(b) of this Act.

SECTION 10.

(a) Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archaeologic, and scientific

features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.

- **(b)** Any portion of a component of the national wild and scenic rivers system that is within the national wilderness preservation system, as established by or pursuant to the Act of September 3, 1964 (78 Stat. 890; 16 U.S.C., ch. 23), shall be subject to the provisions of both the Wilderness Act and this Act with respect to preservation of such river and its immediate environment, and in case of conflict between the provisions of these Acts the more restrictive provisions shall apply.
- (c) Any component of the national wild and scenic rivers system that is administered by the Secretary of the Interior through the National Park Service shall become a part of the national park system, and any such component that is administered by the Secretary through the Fish and Wildlife Service shall become a part of the national wildlife refuge system. The lands involved shall be subject to the provisions of this Act and the Acts under which the national park system or national wildlife refuge system, as the case may be, is administered, and in case of conflict between the provisions of these Acts, the more restrictive provisions shall apply. The Secretary of the Interior, in his administration of any component of the national wild and scenic rivers system, may utilize such general statutory authorities relating to areas of the national park system and such general statutory authorities otherwise available to him for recreation and preservation purposes and for the conservation and management of natural resources as he deems appropriate to carry out the purposes of this Act.
- (d) The Secretary of Agriculture, in his administration of any component of the national wild and scenic rivers system area, may utilize the general statutory authorities relating to the national forests in such manner as he deems appropriate to carry out the purposes of this Act.
- (e) The Federal agency charged with the administration of any component of the national wild and scenic rivers system may enter into written cooperative agreements with the Governor of a State, the head of any State agency, or the appropriate official of a political subdivision of a State for State or local governmental participation in the administration of the component. The States and their political subdivisions shall be encouraged to cooperate in the planning and administration of components of the system which include or adjoin State-or county-owned lands.

SECTION 11.

(a) The Secretary of the Interior shall encourage and assist the states to consider, in formulating and carrying out their comprehensive statewide outdoor recreation plans and proposals for financing assistance for State and local projects submitted pursuant to the Land

and Water Conservation Fund Act of 1965 (78 Stat. 897), needs and opportunities for establishing State and local wild, scenic and recreational river areas.

- (b) (1) The Secretary of the Interior, the Secretary of Agriculture, or the head of any other Federal agency, shall assist, advise, and cooperate with States or their political subdivisions, landowners, private organizations, or individuals to plan, protect, and manage river resources. Such assistance, advice and cooperation may be through written agreements or otherwise. This authority applies within or outside a federally administered area and applies to rivers which are components of the National Wild and Scenic Rivers System and to other rivers. Any agreement under this subsection may include provisions for limited financial or other assistance to encourage participation in the acquisition, protection, and management of river resources.
 - (2) Wherever appropriate in furtherance of this Act, the Secretary of Agriculture and the Secretary of the Interior are authorized and encouraged to utilize the following:
 - (A) For activities on federally owned land, the Volunteers in the Parks Act of 1969 (16 U.S.C. 18g-j) and the Volunteers in the Forest Act of 1972 (16 U.S.C. 558a-558d).
 - **(B)** For activities on all other lands, section 6 of the Land and Water Conservation Fund Act of 1965 (relating to the development of statewide comprehensive outdoor recreation plans).
 - (3) For purposes of this subsection, the appropriate Secretary or the head of any Federal agency may utilize and make available Federal facilities, equipment, tools and technical assistance to volunteers and volunteer organizations, subject to such limitations and restrictions as the appropriate Secretary or the head of any Federal agency deems necessary or desirable.
 - (4) No permit or other authorization provided for under provision of any other Federal law shall be conditioned on the existence of any agreement provided for in this section.

SECTION 12.

(a) The Secretary of the Interior, the Secretary of Agriculture, and the head of any other Federal department or agency having jurisdiction over any lands which include, border upon, or are adjacent to, any river included within the National Wild and Scenic Rivers System or under consideration for such inclusion, in accordance with section 2(a)(ii), 3(a), or 5(a), shall take such action respecting management policies, regulations, contracts, plans, affecting such

lands, following the date of enactment of this sentence, as may be necessary to protect such rivers in accordance with the purposes of this Act. Such Secretary or other department or agency head shall, where appropriate, enter into written cooperative agreements with the appropriate State or local official for the planning, administration, and management of Federal lands which are within the boundaries of any rivers for which approval has been granted under section 2(a)(ii). Particular attention shall be given to scheduled timber harvesting, road construction, and similar activities which might be contrary to the purposes of this Act.

- **(b)** Nothing in this section shall be construed to abrogate any existing rights, privileges, or contracts affecting Federal lands held by any private party without the consent of said party.
- **(c)** The head of any agency administering a component of the national wild and scenic rivers system shall cooperate with the Administrator, Environmental Protection Agency and with the appropriate State water pollution control agencies for the purpose of eliminating or diminishing the pollution of waters of the river.

SECTION 13.

- (a) Nothing in this Act shall affect the jurisdiction or responsibilities of the States with respect to fish and wildlife. Hunting and fishing shall be permitted on lands and waters administered as parts of the system under applicable State and Federal laws and regulations unless, in the case of hunting, those lands or waters are within a national park or monument. The administering Secretary may, however, designate zones where, and establish periods when, no hunting is permitted for reasons of public safety, administration, or public use and enjoyment and shall issue appropriate regulations after consultation with the wildlife agency of the State or States affected.
- **(b)** The jurisdiction of the States and the United States over waters of any stream included in the national wild, scenic or recreational river area shall be determined by established principles of law. Under the provisions of this Act, any taking by the United States of a water right which is vested under either State or Federal law at the time such river is included in the national wild and scenic rivers system shall entitle the owner thereof to just compensation. Nothing in this Act shall constitute an express or implied claim or denial on the part of the Federal Government as to exemption from State water laws.
- **(c)** Designation of any stream or portion thereof as a national wild, scenic or recreational river area shall not be construed as a reservation of the waters of such streams for purposes other than those specified in this Act, or in quantities greater than necessary to accomplish these purposes.

- (d) The jurisdiction of the States over waters of any stream included in a national wild, scenic or recreational river area shall be unaffected by this Act to the extent that such jurisdiction may be exercised without impairing the purposes of this Act or its administration.
- (e) Nothing contained in this Act shall be construed to alter, amend, repeal, interpret, modify, or be in conflict with any interstate compact made by any States which contain any portion of the national wild and scenic rivers system.
- **(f)** Nothing in this Act shall affect existing rights of any State, including the right of access, with respect to the beds of navigable streams, tributaries, or rivers (or segments thereof) located in a national wild, scenic or recreational river area.
- (g) The Secretary of the Interior or the Secretary of Agriculture, as the case may be, may grant easements and rights-of-way upon, over, under, across, or through any component of the national wild and scenic rivers system in accordance with the laws applicable to the national park system and the national forest system, respectively: *Provided*, That any conditions precedent to granting such easements and rights-of-way shall be related to the policy and purpose of this Act.

SECTION 14.

The claim and allowance of the value of an easement as a charitable contribution under section 170 of title 26, United States Code, or as a gift under section 2522 of said title shall constitute an agreement by the donor on behalf of himself, his heirs, and assigns that, if the terms of the instrument creating the easement are violated, the donee or the United States may acquire the servient estate at its fair market value as of the time the easement was donated minus the value of the easement claimed and allowed as a charitable contribution or gift.

SECTION 14A.

(a) Where appropriate in the discretion of the Secretary, he may lease federally owned land (or any interest therein) which is within the boundaries of any component of the National Wild and Scenic Rivers system and which has been acquired by the Secretary under this Act. Such lease shall be subject to such restrictive covenants as may be necessary to carry out the purposes of this Act.

(b) Any land to be leased by the Secretary under this section shall be offered first for such lease to the person who owned such land immediately before its acquisition by the United States

SECTION 15.

Notwithstanding any other provision to the contrary in sections 3 and 9 of this Act, with respect to components of the National Wild and Scenic Rivers System in Alaska designated by paragraphs (38) through (50) of section 3(a) of this Act –

- (1) the boundary of each such river shall include an average of not more than six hundred and forty acres per mile on both sides of the river. Such boundary shall not include any lands owned by the State or a political subdivision of the State nor shall such boundary extend around any private lands adjoining the river in such manner as to surround or effectively surround such private lands; and
- (2) the withdrawal made by paragraph (iii) of section 9(a) shall apply to the minerals in Federal lands which constitute the bed or bank or are situated within one-half mile of the bank of any river designated a wild river by the Alaska National Interest Lands Conservation Act.

SECTION 16.

As used in this Act, the term -

- (a) "River" means a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes.
- **(b)** "Free-flowing," as applied to any river or section of a river, means existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modifi-cation of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic rivers system shall not automatically bar its consideration for such inclusion: *Provided*, That this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the national wild and scenic rivers system.
- (c) "Scenic easement" means the right to control the use of land (including the air space above such land) within the authorized boundaries of a component of the wild and scenic rivers system, for the purpose of protecting the natural qualities of a designated wild, scenic or recreational river area, but such control shall not affect, without the owner's consent, any regular use exercised prior to the acquisition of the easement. For any designated wild and scenic river, the appropriate Secretary shall treat the acquisition of fee title with the reservation of regular existing uses to the owner as a scenic easement for purposes of this Act. Such an acquisition shall not constitute fee title ownership for purposes of section 6(b).

SECTION 17.

There are hereby authorized to be appropriated, including such sums as have heretofore been appropriated, the following amounts for land acquisition for each of the rivers described in section 3(a) of this Act:

Clearwater, Middle Fork, Idaho, \$2,909,800; Eleven Point, Missouri, \$10,407,000; Feather, Middle Fork, California, \$3,935,700; Rio Grande, New Mexico, \$253,000; Rogue, Oregon, \$15,147,000 St. Croix, Minnesota and Wisconsin, \$21,769,000; Salmon, Middle Fork Idaho, \$1,837,000; and Wolf Wisconsin, \$142,150.

Appendix C: Inventory of Special Mandates and Administrative Commitments

Special Mandates and Administrative Commitments							
Name	Agreement Type	Start / Expiration Date	Stakeholders	Purpose			
Wild and scenic river designation	Special mandate	Nov. 10, 1978 / No expiration	Upper Delaware Council, Delaware River Basin Commission (DRBC), states (PA, NY), local municipalities, local land owners, Upper Delaware Citizens Advisory Council	Preserve the free-flowing condition, water quality, and outstandingly remarkable values of the river corridor.			
River Management Plan	Special mandate	Nov. 1986 / No expiration	Upper Delaware Council, DRBC, states (PA, NY), local municipalities, Upper Delaware Citizens Advisory Council	Required to be developed per enabling legislation and calls for coordinated implementation and administration.			
Upper Delaware Scenic and Recreational River Land and Water Use Guidelines	Special mandate	Nov. 1986 / When revised or updated	Upper Delaware Council, DRBC, states (PA, NY), local municipalities, local land owners, Upper Delaware Citizens Advisory Council	Required per enabling legislation, to be developed and implemented by the states, DRBC, and local governments. Stipulates that land use measures (zoning) "substantially conform" to the Guidelines and establishes potential consequences for clear and direct threats. Specifies compatible and incompatible uses in the river corridor.			
Provide technical assistance	Special mandate		States (PA, NY); local municipalities, community organizations	Ensure that the river values are protected by assisting political subdivisions in projects and developments.			
Upper Delaware Council	Cooperative agreement	Feb. 18, 1988 / No expiration	NPS and Upper Delaware Council	Ensure cooperation and provide funding.			
Authorization to acquire land	Special mandate	Nov. 1986 / No expiration	nonprofit organizations, land trusts	The NPS is authorized to acquire land (up to 124 acres on a willing seller-willing buyer basis per the 1986 River Management Plan) if it is deemed necessary to protect river values.			
The Upper Delaware Act, PL 95-625	Special mandate	Nov. 10, 1978	Upper Delaware Council, DRBC, states (PA, NY), local municipalities, local land owners, Upper Delaware Citizens Advisory Council	Preserve the free-flowing condition, water quality, and outstandingly remarkable values of the river corridor.			
Land and Water Use Guidelines	Administrative commitment	Nov. 1986	Upper Delaware Council, DRBC, states (PA, NY), local municipalities, local land owners, Upper Delaware Citizens Advisory Council	Provides guidance to local, state, and federal governments on the enforcement of land and water use regulations based on the management principles established in the Wild and Scenic Rivers Act.			

Appendix D: Related Federal Legislation, Regulations, and Executive Orders

Legislation and Acts

- Archeological and Historical Preservation Act of 1974
- Archeological Resources Protection Act of 1979
- Clean Air Act of 1977
- Clean Water Act of 1972
- Endangered Species Act of 1973
- Migratory Bird Treaty Act of 1918
- National Environmental Policy Act of 1969
- National Historic Preservation Act of 1966
- National Parks Omnibus Management Act of 1998
- National Park Service Organic Act of 1916
- National Trails System Act of 1968
- National Wild and Scenic Rivers Act of 1968
- Redwood Act, Amending the NPS Organic Act of 1978

Code of Federal Regulations

- Title 36, Chapter 1, Part 1, General Provisions
- Title 36, Chapter 1, Part 2, Resource Protection, Public Use and Recreation
- Title 36, Chapter 1, Part 4, Vehicles and Traffic Safety
- Title 36, Chapter 1, Part 5, Commercial and Private Operations
- Title 36, Chapter 1, Part 7, Section 24, Upper Delaware Scenic and Recreational River

Executive Orders

- Executive Order 11514, "Protection and Enhancement of Environmental Quality"
- Executive Order 11593, "Protection and Enhancement of the Cultural Environment"
- Executive Order 11988, "Floodplain Management"
- Executive Order 11990. "Protection of Wetlands"
- Executive Order 12003, "Energy Policy and Conservation"
- Executive Order 12088, "Federal Compliance with Pollution Control Standards"
- Executive Order 12372, "Intergovernmental Review of Federal Programs"
- Executive Order 12898, "General Actions to Address Environmental Justice in Minority Populations and Low-Income Population"

- Executive Order 12962, "Recreational Fisheries"
- Executive Order 13007, "Indian Sacred Sites"
- Executive Order 13112, "Invasive Species"
- Executive Order 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds"
- Executive Order 13352, "Facilitation of Cooperative Conservation"
- Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management"
- Executive Order 13514, "Federal Leadership in Environmental, Energy, and Economic Performance"

NPS Director's Orders (partial list)

- Order 12: Conservation Planning, Environmental Impact Analysis, and Decision Making and Handbook
- Order 18: Wildland Fire Management
- Order 28: Cultural Resource Management
- Order 47: Soundscape Preservation and Noise Management
- Order 77: Natural Resource Protection
- Order 77-1: Wetland Protection
- Order 77-2: Floodplain Management



Appendix E: Wild and Scenic River Values

Wild and Scenic Rivers Act

In 1968, Congress passed the Wild and Scenic Rivers Act. The act "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."

Under the Wild and Scenic Rivers Act, designated rivers are classified as wild, scenic, or recreational. The classifications primarily relate to the degree of development along the river. Regardless of the classification, each designated river in the national system is to be managed in a way that protects and enhances the values that prompted its designation. According to the act, the three classifications are defined as follows:

"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.

"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.

"Recreational" River Areas. Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some shoreline development, and that may have undergone some impoundment or diversion in the past.

Wild and Scenic Rivers Act Values

Outstandingly remarkable values (ORVs) are defined by the Wild and Scenic Rivers Act as the characteristics that make a river worthy of special protection. In addition, free-flowing condition and water quality are also integral to the protection of wild and scenic rivers. Because free-flowing condition and water quality support the integrity of the ORVs and are key components for future management, they are included as part of this statement. Thus, the foundation for wild and scenic river management is a clearly defined set of ORVs, free-flowing condition, and water quality.

The Interagency Wild and Scenic Rivers Coordinating Council issued criteria for identifying and defining outstandingly remarkable values. The criteria guidance states that:

An ORV must be river related or dependent. This means that a value must be located in the river or on its immediate shore lands (generally within 0.25 mile on either side of the river), contribute substantially to the functioning of the river ecosystem, and owe its location or existence to the presence of the river.

An ORV must be rare, unique, or exemplary at a comparative regional or national scale. Such a value would be one that is a conspicuous example from among a number of similar values that are themselves uncommon or extraordinary.

Upper Delaware Scenic and Recreational River Outstandingly Remarkable Values

From: Delaware River Basin, National Wild and Scenic River Values, Pennsylvania, New York, and New Jersey. U.S. DOI National Park Service. Pages 20–29, 65–66

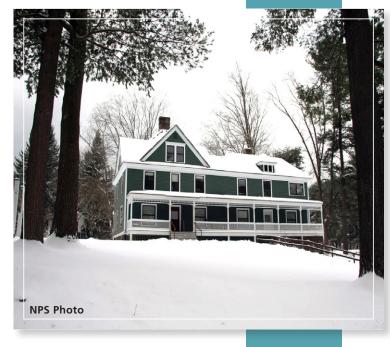
The outstandingly remarkable values that make the Upper Delaware National Scenic and Recreational River worthy of protection under the Wild and Scenic Rivers Act are described on the following pages.

Cultural

"Although it lies just to the west and northwest of the Boston-to-Washington urban corridor, the Upper Delaware River appears relatively untouched by the frenetic pace of the mid-20th century. The Upper Delaware and its riverside communities have managed to retain those qualities and values of earlier times which elsewhere have passed into memory, perishing in the onslaught of industrialization, modernization, urban sprawl, and other similar forces of contemporary life. The counties which form the ... region have remained essentially rural ... some of these qualities and values may still be seen as they appeared to earlier eyes. This special quality, this pace of daily life, is easily discernible by comparison with the large cities and suburban overflows of the Eastern Megalopolis."

Dating from the Paleo through the transitional period, 437 documented precontact archeological sites record a rich cultural tapestry of riverine occupation of aboriginal people who used the river as a trade route. Eighteen archeological sites worthy of more detailed investigation and one site eligible for listing in the National Register of Historic Places (NRHP), taken collectively with the archeological sites on downstream segments, are exemplary of Munsee peoples and their predecessors. Several privately owned archeological sites illustrate the history of early European settlers who arrived in the mid-18th century. Remnants of the early settlements along the river help to convey the history of the early subsistence period to the mid-1700s, including small-scale rural hydro-powered industry in the northeast, while the NRHP-listed Minisink Battleground Park tells the story of a Revolutionary War battle between local residents and militia, and Indians and Tories under the command of Joseph Brant.

Extractive industries dependent on water power and water-related transportation spurred an industrial economy, contributing to a pattern of hamlet settlement identifiable today. The timber rafting industry was introduced in the 1760s to transport ship's mast-length logs to Easton and Philadelphia. From the end of the Revolutionary War to the early 1900s, this industry fed the local economy, stripping the hillsides of white pine and hemlock, while contributing to the growth of colonial America. Early 1800s technological development spurred construction of historic transportation routes dependent on the river and valley geology for defining their routes, each contributing to the cultural profile of the Upper Delaware. Timber, coal, and bluestone transported to coastal markets contributed to growth of the early American economic centers.





The first business in the United States to be capitalized for a million dollars, the Delaware and Hudson (D&H) Canal operated from 1829 to 1898. The 171-mile-long engineering feat included 16 miles of gravity railway, 108 locks over 108 miles, and four cable-suspension aqueducts to connect the coal fields of Pennsylvania with the Hudson River and New York City markets. Roebling's Delaware Aqueduct carried the canal across the Delaware between Lackawaxen, Pennsylvania, and Minisink Ford, New York. North America's oldest existing wire suspension bridge, this NPS-owned National Historic Landmark and National Historic Civil Engineering Landmark received the Presidential Design Award for its adaptive reuse restoration as a one-lane vehicular bridge known locally as Roebling Bridge. The D&H traversed the southern river corridor, paralleling the river for 25 miles between Lackawaxen, Pennsylvania, and Port Jervis, New York, before veering to the northeast. The stone remnants can easily be seen by both boaters on the river and tourists along the Upper Delaware Scenic Byway. Of particular note is Corwin Farm, eligible for listing in the National Register of Historic Places and owned by the National Park Service, a canal-era lock tender's house and barn along an intact portion of the canal.

The Erie Railroad, America's first long line railway, connected New York City with the Great Lakes and west. The Port Jervis line traversed the entire river corridor, spurring thriving hamlets as it progressed north and westward, carrying immigrants to the frontier. It also provided transportation to the Upper Delaware region for city workers who found fresh air, restful landscape, and good home cooking at local farms and boarding houses, contributing to "the Catskills and the Poconos," geographic areas famous for hospitality for nearly 150 years. Two early depots, the NRHP-listed Old Cochecton Station and the Callicoon Depot, remain. One notable vacationing fisherman, author Zane Grey, stayed on to establish a home on the Delaware at Lackawaxen, Pennsylvania, where he wrote his earliest articles and books, including *Riders of the Purple Sage*. The National Park Service owns and manages a museum at the NRHP-listed Zane Grey House.

The railroad, and later New York State Route 97 (the Upper Delaware Scenic Byway), led to construction of several notable NRHP-listed historic bridges using petite and through-truss steel construction methods as well as stone arch construction on nearby tributaries. Many of the homes and commercial buildings dating to the late 1800s and early 1900s are extant; of note are National Register of Historic Places districts in Cochecton, Damascus, Milanville, and Equinunk, in addition to a number of individual National Register of Historic Places listings. Eighty-six historic archeological sites, in addition to 73 individual structures, were identified during a NPS-funded cultural resource survey. Four-lane highways of the 20th century divert much of today's industrial transportation around the Upper Delaware River corridor, leaving behind an unsullied testimony to a culture dependent on the bucolic Upper Delaware Scenic and Recreational River.

Ecological

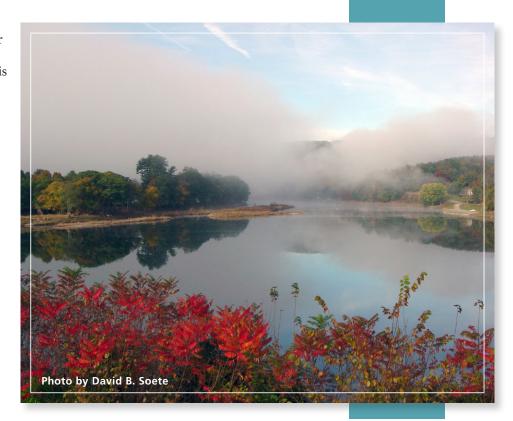
The Upper Delaware River exhibits some of the highest ecological integrity found in any of the large rivers of this region. As the least-developed section of the last major river on the Atlantic Coast, undammed the entire length of its mainstem, the Upper Delaware's wild and scenic, largely ecologically intact, free-flowing character supports key components and processes that contribute to the superb natural resources found here. Exceptional water quality, resulting from a predominately forested landscape, sustains high quality fish and aquatic insect assemblages. Excellent in-channel conditions result in an abundance of riffles, runs, and pools, and a diversity of in-stream habitats. These aquatic conditions, combined with good riparian habitat that is coupled with a functioning floodplain, provides great hydrological connectivity, structure, and function.

The unobstructed river affords access to the full complement of sea-run migratory fish into and above this segment, thus allowing historic fluxes of nutrients, energy, and biomass to and from the ocean. These features combine to provide a complex food web, a wide variety of habitats, and a healthy diversity of species.

The riparian area along the river supports rare terrestrial plant communities, such as ice scour rock outcrop, seep communities, and bitternut hickory lowland woodland. The river itself sustains diverse and healthy native aquatic plant communities, including a plentiful population of threadfoot riverweed, a relatively rare aquatic plant that is indicative of excellent water quality. A diversity and extraordinary abundance of freshwater mussels further contribute to water quality and nutrient processing. The Upper Delaware provides habitat for a sizeable population of the federally endangered dwarf wedgemussel, as well as several state threatened and endangered species including bridle shiner, and brook floater mussel.

The Upper Delaware River's ecological value extends beyond this segment of river. It provides regionally important high quality historic spawning and rearing habitat for searun migratory fish, helping to buttress their larger range-wide populations. In addition

to native brook trout, the river and tributaries support thriving recreational fisheries for naturalized rainbow trout and brown trout. The river corridor is also regionally important inland bald eagle wintering habitat for birds from as far away as the maritime provinces of Canada, and serves as a migratory bird stopover along the Atlantic flyway. The Upper Delaware provides drinking water for millions of people, all helping to underscore the Delaware's significance beyond its own watershed.



Geological

The Upper Delaware Scenic and Recreational River is an exceptional example of a deep, narrow river valley cutting across the Small Lakes section of the glaciated portion of the Appalachian Plateau. The overall landscape is a fluvial or stream-cut landscape modified by stream derangements from glacial deposits burying portions of preglacial valleys. Examples of significant geologic features include sandstone cliffs, barbed tributaries, glacial deposits, glacial outwash terraces, diverse channel morphologies, exposed ancient bedrock, bedrock knobs, cutoff incised meanders, island complexes, gorges, and fossils.

The area's rolling hills vary in elevation from 800 to 2,000 feet and are characterized as a series of indistinct and irregular escarpments. Relief is generally between 300 and 500 feet, although it ranges to 700 feet in a few locations. Point Mountain, defining the northernmost extent of the wild and scenic river designation, is an isolated bedrock knob formed by glacial meltwater that eroded through a ridgeline between the east and west branches of the Delaware River. Sandstone cliffs, clearly evident at places like Hawk's Nest, show ancient river channel deposits that have a wide variety of bedding features, including three types of cross-bedding, ripple marks, current lineation, tool marks, mud cracks, and conglomerates. Fossilized plant and animal remains are found here, such as bony plates from the armored fish of Devonian times, rachiopods and mollusks, a few types of coral, bryozoans, cephalopods, and rare trilobites.

Glacial deposits partially fill many of the tributary valleys, especially those that are oriented transverse to the direction of the most recent ice age glacier. The post-glacial Delaware River cut into the bedrock and glacial materials at least 200 feet. Many of the tributary valleys have narrow, deep gorges with a series of waterfalls. These steeper-sloped tributaries have deposited alluvial or debris flow fans on the floodplain. Barbed tributaries, including Shehawken Creek, Calkins Creek, and Callicoon Creek, are another unique geologic anomaly where the streams enter the river in an unusual upstream direction. These barbed tributaries are evidence that the drainage patterns of the river once flowed to the north and were then reversed to the south by erosional forces.

The Upper Delaware River has a variety of channel patterns ranging from pool-riffle chains in straight reaches to elongated pool-riffle chains in incised meander reaches to anastomosing channel reaches with a number of islands to short bedrock gorge reaches. For example, the Narrows is a short gorge cut through the bedrock of a preglacial ridge that once occupied the site.

The Narrowsburg Pool is a plunge pool at the downstream end of the Narrows, possibly formed from a submerged waterfall. During flood flows, the river may scour down 150 feet into glacial deposits, subsequently refilling the pool with sediment transported from upstream to an approximate depth of 113 feet at normal flow levels. Skinners Falls, Shohola Rapids, and Staircase Rapids are examples of bedrock-floored rapids where the river has incised through glacial fill and cut into the bedrock of the valley side, in essence bypassing its preglacial channel.

The convoluted drainage pattern of the Delaware River system provides a rare combination of drainage anomalies that challenge various explanations of how Appalachian river systems evolved over geologic time. The diversity of valley orientations has produced an equal diversity of geologic hypotheses that try to explain how the pattern came to be.

Recreational

The Upper Delaware River is known for its outstanding recreational activities from tubing the rapids on a hot summer day to relaxing on a hidden deck, slope side in the Pocono or Catskill mountain forests. The river's close proximity and accessibility attracts visitors from major metropolitan areas along the northeast corridor, including Boston, New York City, Philadelphia, and Washington, D.C.

The Upper Delaware provides a relatively undeveloped and varied river setting that is ideal for families and recreationists of all levels.

The river corridor offers a wide variety of recreational activities ranging from heavily used accesses at Skinners Falls, Narrowsburg, Mongaup, and Sparrowbush, to opportunities for solitude while hiking or canoeing various other stretches of the river. River reaches from Lordville to Callicoon, and Narrowsburg to Lackawaxen provide some of the most remote and serene experiences along the Upper Delaware.

The Upper Delaware segment is surrounded primarily by privately owned property, but there are 18 well-marked and easily accessible public access points. These developed boat and canoe launches on both sides of the river are available to the public approximately every 5 river miles. Privately owned and operated access points also exist along the river. All of these facilities, easily accessible by rural roads, include river information and amenities during the periods of heaviest visitor use. Four of the public access sites are staffed by NPS personnel during peak periods, making it easy for visitors to obtain information about recreation opportunities.

River activities include canoeing, kayaking, boating, tubing, rafting, SCUBA diving, snorkeling, swimming, and hunting waterfowl. The Upper Delaware's cold water fishery between Hancock and Callicoon attracts anglers from around the world, especially those interested in fly fishing for its world renowned wild trout. This type of fishing experience is seldom found elsewhere in the region.

Other recreational activities include photography, wildlife viewing, birdwatching, picnicking, trapping and hunting for both small and big game, and hiking/cross-country skiing at places such as Jensens Ledges, Tusten Mountain Trail, Game Lands 316, Buckhorn Natural Area, Damascus Forest, and Minisink Battleground Park. Sightseeing can be found at numerous scenic overlooks such as Jensens Ledges, Peggy Runway, Indian Ledges, and Hawk's Nest, as well as at historic sites such as Roebling's Delaware Aqueduct (known locally as Roebling Bridge) and Zane Grey House. Auto touring and cycling along the Upper Delaware Scenic Byway (New York State Route 97) and New York State Bicycle Route 17 is also popular. Camping at both primitive and developed commercial campgrounds, fall foliage viewing, resorts, downhill skiing, geocaching, scientific research, education activities, and ranger-led activities are also popular. Eagle watching is particularly popular in the Lackawaxen area. The Eagle Institute, a project of the Delaware Highlands Conservancy, operates eagle viewing platforms and provides interpretive services in the area.

Experienced commercial outfitters provide canoe, kayak, and raft rentals, as well as transportation between access points. Guided trips are also available. Commercial fishing guides provide guided fishing trips for both warm and cold water fish species. These guides and outfitters provide opportunities for beginners as well as experienced river users to easily explore the river. The mixture of class I and II rapids (Skinners Falls, Staircase, Mongaup, and Butlers Rift) with riffles, runs, and pools offer a varied and high-quality recreational experience on the river. Beginners to expert boaters alike can find something on the Upper Delaware to challenge their skills and provide an outstanding boating experience.

The exceptional water quality provides the recreationist remarkably clean water for swimming, tubing, and boating in quiet eddies or swift-moving rapids. The exceptional clarity of the water provides the swimmer, tuber, boater, and SCUBA diver or snorkeler remarkable subsurface visibility. SCUBA diving and snorkeling are particularly popular activities at Narrowsburg and Skinners Falls.

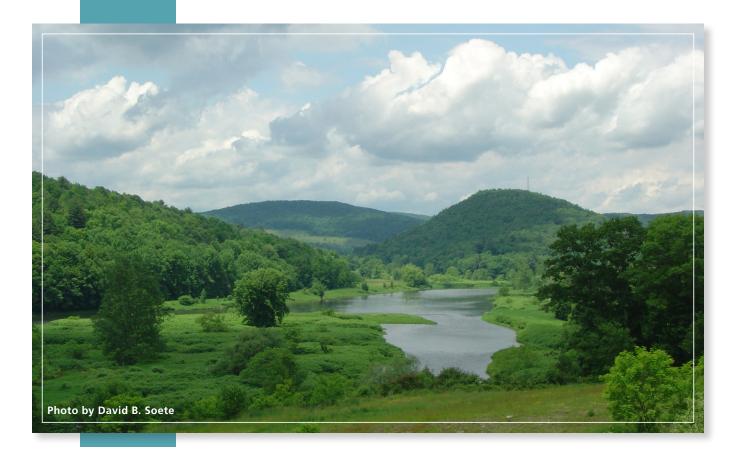
Scenic

The scenic quality of the Upper Delaware River is recognized as regionally significant due to its picturesque gorge, riparian vegetation, steep forested slopes and gently rolling hills. The agricultural fields and livestock pastures add variety to this tranquil scene.

The riffles, runs, rapids, and pools of the river provide an ever-changing visual stimulus that is enhanced by the water clarity providing for amazing views of the landscape, the river bottom, and aquatic life.

Rock outcroppings, cliff faces, and exposed unusual sedimentary formations add to the stimulating visual variety of the Upper Delaware. A number of cascading waterfalls, including Peggy Runway with the largest drop of any waterfall in Pennsylvania, delight the viewer. The contrasting hardwood forest and evergreen stands provide a rich variety of colors and textures across the four seasons. Additional outstanding natural features, landforms, and topographic features include, but are not limited to: Hawk's Nest, York Lake Falls, Jensens Ledges/Bouchoux Trail, and Point Mountain. Dark night skies are prevalent.

The Upper Delaware scenery is rich in structures and sites that reflect its history of agricultural and transportation-based development. The historic canal, railroad, petite truss bridges, hotels, inns, taverns, homes, a hillside seminary built with local bluestone, and other unique structures provide beautiful scenic backdrops and a feeling of nostalgia for early American ingenuity. Particularly notable are the Roebling's Delaware Aqueduct (Roebling Bridge) and the privately owned prominent, stately and historic buildings; remnants of the Delaware and Hudson Canal; and Cochecton Station. The Hawk's Nest stone wall along the Upper Delaware Scenic Byway provides the best overlook of the unspoiled river valley.



Free-flowing Condition

Four dams exist on tributaries to the Upper Delaware River (table 1) impounding water from approximately 38% of the Upper Delaware watershed. Flows in the Upper Delaware River—especially in the uppermost section—are impacted by two New York City (NYC) reservoirs: the Cannonsville Reservoir on the west branch of the Delaware and the Pepacton Reservoir on the east branch of the Delaware. Flows in the lower section of the Upper Delaware River and the upper section of the Middle Delaware River are impacted by releases from a hydroelectric generating facility (not a NYC reservoir) on the Lackawaxen River, and to a much lesser extent by releases from the Rio hydroelectric generating facility (not a NYC reservoir) on the Mongaup River.

Table 1. Reservoirs Upstream of the Upper Delaware River							
Reservoir Name	State	Tributary	River Mile at Tributary Mouth	Date of First Operation	Drainage Area (mi²)	Capacity (billions of gallons)	Main Purpose
Cannonsville	NY	West Branch Delaware River	330	Sept. 1963	454	99	Diversion to NYC
Pepacton	NY	East Branch Delaware River	330	Sept. 1954	372	150	Diversion to NYC
Lake Wallenpaupack	PA	Wallenpaupack Creek to Lackawaxen River	278	1926	228	88	Hydro-electric generation
Rio System	NY	Mongaup River (3 reservoirs)	261	Jan. 1930	116	11	Hydro-electric generation

Due to its proximity to large metropolitan centers and the Delaware River Compact, the Delaware River basin is well gaged. Table 2 provides a list of existing USGS gages of the Upper Delaware.

Table 2. USGS Discharge Gages on the Delaware River and Tributaries Upstream of / Within the Upper Delaware River								
USGS Gage Station No.	Gage Name	River Mile	Elevation (ft)	Watershed Area (mi²)	Period of Record	Years of Record		
01421000	East Branch Delaware River at Fishs Eddy	NA	956	784	1912-	99		
01426500	West Branch Delaware River at Hale Eddy	NA	946	595	1912-	99		
01427200	Equinunk Creek near Equinunk, PA	NA	890	56.3	1946-	66		
01427207	Delaware River at Lordville	322	842	1,590	2006-	5		
01427510	Delaware River at Callicoon	304	735	1,820	1975-	37		
01428500	Delaware River above Lackawaxen River Near Barryville	279	600	2,020	1940-	71		
01432110	Lackawaxen River at Rowland	NA	670	589	2007-	4		

A number of modifications to the waterway exist on the Delaware River. The following modifications exist within the Upper Delaware Scenic and Recreational River.

Waterway modifications within the Upper Delaware River

- Village of Hancock sewage treatment plant outfall; river mile 330.5
- New York State Route 97 berm, various points; river mile 258–330.5
- Pennsylvania Route 191 berm, various points; river mile 322–330.5
- New York Central (former Erie) Railroad line berm, various points along either side of river; river mile 258–330.5
- approximately 50 unimproved public, commercially owned and private accesses exist throughout the corridor; river mile 258–330.5
- several buildings, decks, former bridge abutments, stairways and other structures; river mile 258–330.5
- communications and powerlines cross the river at approximately 15 locations
- Lordville Bridge connecting Equinunk, PA, and Lordville, NY; river mile 322
- Kellams Bridge connecting Stalker, PA, and Kellams, NY; river mile 313
- · Callicoon Bridge; river mile 304
- Town of Delaware flood diversion channel; river mile 303
- · Damascus/Cochecton Bridge; river mile 299
- Milanville/Skinners Falls Bridge; river mile 295
- Eel weir; river mile 293
- Narrowsburg New York State Department of Environmental Conservation (DEC)
 Boat Launch and bulkhead; river mile 290
- Narrowsburg Bridge; river mile 289.7
- Hamlet of Narrowsburg sewage treatment plant outfall; river mile 289.5
- Eel weir; river mile 288
- · No. 9 Railroad Bridge; river mile 284
- Roebling's Delaware Aqueduct (Roebling Bridge); river mile 277
- Delaware and Hudson Canal berm, walls and appurtenances, various points; river mile 258-277.5
- D&H Canal Timber Crib Dam Remnants; river mile 277.5
- Shohola/Barryville Bridge; river mile 273
- Pond Eddy Bridge; river mile 265.5
- No. 2 Railroad Bridge at Millrift; river mile 258 (Southern Terminus of the Upper Delaware River)
- Columbia Gas Transmission Corporation; river mile 258.6

Water Quality

In addition to excerpted text from *Delaware River Basin*, *National Wild and Scenic River Values*, some of this text was excerpted from the associated Water Quality Technical Specialist Report and some was written specifically for this document.

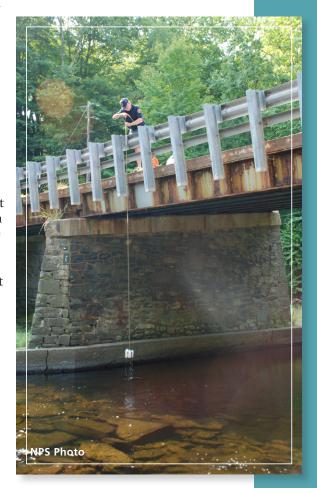
Water quality in the nontidal portion of the Delaware River is perhaps the purest of all the large rivers in the mid-Atlantic and northeastern United States.

The water quality in the Upper Delaware River Basin is extraordinary. All Pennsylvania tributaries to the Upper Delaware Scenic and Recreational River are designated as High Quality (HQ) except for Mill Rift, which is designated as Exceptional Value (EV). The Delaware River Basin Commission (DRBC) has classified as "Outstanding Basin Waters" the Upper Delaware Scenic and Recreational River (between River Mile 330.7 and 258.4). These waters are classified as having exceptionally high scenic, recreational, and ecological values that require special protection.

The U.S. Environmental Protection Agency recommends the concentration of total dissolved solids to be at or below 500 mg/L to protect aquatic organisms from negative impacts of excessive ions in the water. However, the Special Protection Waters segments of the Upper Delaware Scenic and Recreational River currently maintain concentrations of dissolved solids typically between 50 mg/L and 100 mg/L, five-to-ten times below the EPA-recommended criteria. Similarly, concentrations of nutrients in the Upper Delaware River are low relative to recommended nutrient criteria. Many waterways throughout the United States are heavily impacted by high nutrient levels and resultant water quality impairments.

New York State recently proposed nutrient criteria ranging from 30 to 65 mg/L for total phosphorus, and 0.7 mg/L for total nitrogen. However, water quality testing within Delaware River Basin Special Protection Waters indicate low nutrient concentrations, with median values around 20 mg/L for total phosphorus and 0.30 mg/L for total nitrogen, indicating healthy water conditions.

Water Quality Objectives set forth by DRBC state that for the region of Upper Delaware Scenic & Recreational River from the confluence of the East and West Branches south to the Narrowsburg Bridge dissolved oxygen should not be less than 5.0 mg/l at any time; have a minimum 24-hour average of 6.0 mg/l; and not less than 7.0 mg/l in spawning areas whenever temperatures are suitable for trout spawning. Temperature should not exceed 5°F (2.8°C) rise above ambient temperature until stream temperature reaches 50°F (10.0°C), should not exceed 2°F (1.1°C) rise above ambient temperature when stream temperature is between 50°F (10.0°C) and 58°F (14.4°C), and natural temperature will prevail above 58°F (14.4°C). The pH should be between 6.0 and 8.5. Phenols are not to exceed 0.005 mg/l unless due to natural conditions. Fecal Coliform bacteria levels are not to exceed 200 per 100 milliliters as a geometric average; and samples shall be taken at such frequency and location as to permit valid interpretation.



Relationship to the Entire Main Stem Delaware River

At most times water quality of the Delaware River exceeds federal and state criteria levels. The river serves as a regional reference condition river for water quality and biological assessments. The uses that are most dependent on the extraordinarily clean water are water supply that requires little treatment, excellent habitat for thriving aquatic life, and waterbased recreation.

Because of such exceptional water quality, maintaining and improving the existing high water quality of the Delaware River is the primary policy of regulatory agencies. This policy is known as anti-degradation, and is consistent with the Wild and Scenic Rivers Act antidegradation policy. The entire 197-mile nontidal portion of the Delaware River between Hancock, New York, and Trenton, New Jersey, is classified by the Delaware River Basin Commission as "Special Protection Waters." This represents the longest contiguous reach of anti-degradation waters in the United States. The Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area are accorded the highest level of anti-degradation protection by the Delaware River Basin Commission as outstanding basin waters. The Lower Delaware River is classified by the Delaware River Basin Commission as significant resource waters. Both classifications are equivalent to Environmental Protection Agency (EPA) tier III anti-degradation protection of water quality and allow "no measurable change in existing water quality except toward natural conditions."

Outstanding basin waters include the additional provision disallowing mixing zones for approved dischargers whereas mixing zones are allowed in significant resource waters. Many tributaries in Pennsylvania, New York, and New Jersey are also afforded a similar level of water quality protection through state regulations, but only those tributaries within the boundaries of Delaware Water Gap National Recreation Area are included as outstanding basin waters by the DRBC Special Protection Waters regulations. Primary regulatory protection of other tributaries within the basin is maintained by the states, although the Delaware River Basin Commission does have some regulatory authority on point source dischargers to tributaries in order to protect the shared interstate waters of the mainstem. The DRBC Special Protection Waters regulations are unique in that they are monitored to determine if "measurable change" is occurring. This monitoring program is conducted through an informal partnership between the NPS and the Delaware River Basin Commission called the Scenic Rivers Monitoring Program. Both the Special Protection Waters regulations and the Scenic Rivers Monitoring Program are crucial to maintaining the level of water quality in the designated waters of the mainstem Delaware River.

The anti-degradation policy is very important, not only for river recreation and aquatic life, but also for the water supply for approximately 16 million people in New York, Pennsylvania, New Jersey, and Delaware. The Delaware River watershed is relatively small, comprising only 0.4% of continental U.S. land area; its clean water is a drinking water source for 5% of the U.S. population.

In comparing water quality of the mainstem Delaware River wild and scenic segments, both the Upper and Middle Delaware segments are the cleanest and healthiest. The Lower Delaware is much more urbanized and historically industrialized and farmed, so water quality is not as good, although it still supports the most stringent of uses.

Northeast Region Foundation Document Recommendation Upper Delaware Scenic and Recreational River

February 2014

This Foundation Document has been prepared as a collaborative effort between park and regional staff and is recommended for approval by the Northeast Regional Director.

RECOMMENDED

Superintendent Upper Delaware Scenic and Recreational River

ulder

December 23, 2013

Date

APPROVED

Regional Director, Northeast Region

Date





As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historic places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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