

Appendix D

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Service staff on Sunkhaze Stream at Sunkhaze Meadows National Wildlife Refuge.

Wild and Scenic Rivers Review

Introduction

The Wild and Scenic Rivers Act (Public Law 90-543 as amended: 16 U.S.C. 1271-1287) established the National Wild and Scenic Rivers System (NWSRS) to provide Federal protection for certain free-flowing rivers, preserving them and their immediate environments for the use and enjoyment of present and future generations.

The act requires Federal agencies to identify and evaluate potential additions to the NWSRS through their land and resource management planning processes. Section 5(d) (1) of this act states in part: “In all planning for the use and development of water and related land resources, consideration shall be given by all Federal agencies involved to potential national wild, scenic and recreational river areas, and all river basin and project plan reports submitted to the Congress shall consider and discuss any such potential.” Wild and scenic river considerations are a required element of comprehensive conservation plans (CCPs) for national wildlife refuges and are conducted in accordance with the refuge planning process outlined in 602 FW 1 and 3, including public involvement and National Environmental Policy Act (NEPA) compliance.

The scope of this wild and scenic rivers review is limited to inventory and tentative classification of the rivers, river segments, and their immediate environments within the Sunhaze Meadows National Wildlife Refuge (NWR, refuge) and Carlton Pond Waterfowl Production Area (WPA) boundaries to determine eligibility. Eligible rivers will be studied at a later date to determine suitability for inclusion in the NWSRS. Regardless, we do not expect the results of the review process, or designation if it occurs, to affect any of the existing public uses or proposed habitat management of Service lands or waters.

Wild and Scenic Rivers Review Process

As part of the Section 5(d) (1) review process, the U.S. Fish and Wildlife Service (Service, we, our) are required to evaluate all river segments that are within the planning area and listed in the Nationwide Rivers Inventory (NRI). The NRI is maintained by the National Park Service (NPS) and lists more than 3,400 free-flowing river segments in the United States that are believed to possess one or more “outstandingly remarkable” natural or cultural values judged to be of more than local or regional significance.

The Wild and Scenic Rivers Act defines a river as “a flowing body of water or estuary or section, portion or tributary thereof, including rivers, streams, crooks, runs, kills, and small lakes.” When a river or river segment is determined to be potentially eligible through the wild and scenic rivers inventory process, its eligibility status is forwarded to the NPS for inclusion into the NRI. The results of this inventory will be forwarded to NPS to update the NRI.

There are three steps in the wild and scenic rivers review process: eligibility, classification, and suitability. A river or stream is eligible if it is free-flowing and has at least one outstandingly remarkable value (ORV). The act identifies an ORV as recreational, geologic, fish and wildlife, historic, cultural, or other similar values. If we find a river or stream is eligible, we determine the appropriate classification. Classification is based on its condition at the time of study. Section 2(b) of the act provides guidance on classification. The act specifies three classification categories: wild river areas, scenic river areas, and recreational river areas (these are discussed in

more detail below under “Wild and Scenic Rivers Classification for Sunkhaze Meadows NWR and Carlton Pond WPA”).

During the third step, we conduct a suitability study to determine if the river or river segments that were found eligible are suitable for designation to the NWSRS. The act identifies the factors that will be considered and documented in determining the suitability of a river or river segment for inclusion in the NWSRS.

Section 4(a) of the act states that the study will include:

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

The study area covers each river or river segment and their immediate environment. The immediate environment is an area extending the length of the river or river segment being studied and extending in width 0.25 miles from each bank of the river.

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

To expedite the CCP process, we deferred the suitability study until after the CCP is completed. River eligibility and classifications assigned during this review are tentative, and are subject to further consideration during the suitability study. Once the study phase is completed, there will be one of two outcomes: a recommendation to designate suitable segments of stream under the Wild and Scenic Rivers Act, or a determination that there are no suitable stream segments and therefore we would not recommend designation at this time. If we determine that there are suitable segments, we would prepare a legislative environmental impact statement. This document, along with the results of the suitability study would be submitted to the Director of the Service, then to the Secretary of the Department of the Interior, then onto the President, and finally to Congress for potential designation. This is a long process and there are several opportunities for public involvement, including the comment period that occurred for the draft CCP and environmental assessment (EA). At this time, we do not know when we might be able to complete the suitability study. We expect it will be several years.

The Inventory Team

We established an inventory team to complete this review. The team was comprised of staff from the Service's Northeast Regional Office, Maine Coastal Islands NWR Complex, and a retired Service employee. The members include the following:

- Beth Goettel, Refuge Manager, Maine Coastal Islands NWR Complex
- Brian Benedict, Deputy Refuge Manager, Maine Coastal Islands NWR Complex
- Michael Langlois, Wildlife Biologist, Maine Coastal Islands NWR Complex
- Lia McLaughlin, Natural Resource Planner, Northeast Regional Office
- Nancy McGarigal, Lead Natural Resource Planner, Northeast Regional Office
- Margaret Engesser, Assistant Outreach Coordinator, Northeast Regional Office
- Barry Brady, (retired) Regional Wilderness Coordinator, Northeast Regional Office

We also shared drafts of this document for review and comment with members of the CCP planning team which includes representatives from Maine Department of Inland Fisheries and Wildlife, the Penobscot Indian Nation, and the Town of Milford.

Phase I. Wild and Scenic Rivers Inventory

Introduction

The wild and scenic rivers inventory identifies rivers or segments of rivers and their immediate environment within the planning area that meet the minimum criteria for wild and scenic river eligibility under the act.

Minimum Wild and Scenic Rivers Criteria

A river, stream, or segment must meet both of the following criteria to be eligible for designation as a wild and scenic river:

- The river or river segment must be free-flowing.
- The river or river segment and its immediate environment must possess at least one ORV associated with the river or stream.

Outstandingly Remarkable Values

ORVs include scenic, recreational, geologic, fish and wildlife, historic, cultural, or similar values. The following definitions were taken from the joint U.S. Department of Agriculture-Forest Service and NPS technical report "The Wild and Scenic River Study Process" (Diedrich and Thomas 1999). These definitions are intended to set minimum thresholds for each ORV to help foster consistency across Federal river-administering agencies. These definitions are only illustrative and not comprehensive. Agencies may modify these criteria or include additional criteria to make them more meaningful in the area of comparison.

- **Scenery:** The landscape elements of landform, vegetation, water, color, and related factors result in notable or exemplary visual features and/or attractions. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.
- **Recreation:** Recreational opportunities are, or have the potential to be, popular enough to attract visitors from throughout or beyond the region of comparison or are unique or rare within the region.

- Interpretive opportunities may be exceptional and attract, or have the potential to attract, visitors from outside the region of comparison.
- The river may provide, or have the potential to provide, settings for national or regional usage or competitive events.
- **Geology:** The river, or the area within the river corridor, contains one or more examples of geologic features, processes, or phenomena that is unique or rare within the region of comparison.
- **Fish:** Fish values can be based on the merits of fish populations, fish habitat, or a combination of the two.
 - **Population:** The river is nationally or regionally an important producer of resident and/or anadromous fish species. Of particular significance is the presence of wild stocks and/or federally listed or State-listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of “outstandingly remarkable.”
 - **Habitat:** The river provides exceptionally high-quality habitat for fish species native to the region of comparison. Of particular significance is habitat for wild stocks and/or federally listed or state-listed (or candidate) threatened, endangered or sensitive species. Diversity of habitats is an important consideration and could, in itself, lead to a determination of “outstandingly remarkable.”
- **Wildlife:** Wildlife values can be based on the merits of terrestrial or aquatic wildlife populations, habitat, or a combination of the two.
 - **Populations:** The river, or area within the river corridor, contains nationally or regionally important populations of native wildlife species. Of particular significance are species considered to be unique, and/or populations of federally listed or state-listed (or candidate) threatened endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of “outstandingly remarkable.”
 - **Habitat:** The river, or area within the river corridor, provides exceptionally high quality habitat for wildlife of national or regional significance, and/or may provide unique habitat or a critical link in habitat conditions for federally listed or state-listed (or candidate) threatened, endangered or sensitive species. Contiguous habitat conditions are such that the biological needs of the species are met. Diversity of habitats is an important consideration and could, in itself, lead to a determination of “outstandingly remarkable.”
- **Prehistory:** The river, or area within the river corridor, contains a site(s) where there is evidence of occupation or use by Native Americans. Sites must have unique or rare

characteristics or exceptional human interest value(s). Sites may have national or regional importance for interpreting prehistory; may be rare and represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; and/or may have been used by cultural groups for rare sacred purposes. Many such sites are listed on the National Register of Historic Places, which is administered by the NPS.

- **History:** The river or area within the river corridor contains a site(s) or feature(s) associated with a significant event, an important person, or a cultural activity of the past that was rare or one-of-a-kind in the region. Many such sites are listed on the National Register of Historic Places. A historic site(s) and/or features(s) is 50 years old or older in most cases.
- **Other Values:** While no specific national evaluation guidelines have been developed for the “other similar values” category, these may include, but are not limited to, hydrological, paleontological, or botanical resources.

Wild and Scenic Rivers Classification

Each river or river segment eligible for inclusion in the NWSRS must be classified as either a wild, scenic, or recreational river. The act provides the following definitions:

- **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 development along their shorelines, and that may have undergone some impoundment or diversion in the past.

Wild and Scenic Rivers Inventory Findings

Below is a summary of the inventory findings for all of the streams and stream segments within the boundaries for Sunhaze Meadows NWR and Carlton Pond WPA.

River or Stream Segment: Fowler Brook and tributary (Benton Unit)

Length: 0.66 miles for Fowler Brook, 0.66 miles tributary

Outstandingly Remarkable Values: None

Tentative Classification: Not applicable

The Benton Unit is one of three units that comprise the Sunhaze Meadows National Wildlife Refuge, and is located near the town of Unity, in Waldo County, Maine. This unit is bordered by roads and agricultural lands on two sides and forested habitat on the other two sides. One stream segment on refuge lands goes through the center of the unit, primarily the grassland habitat. The

other stream segment follows the eastern edge of the unit and is bordered by forest. Both stream segments are small, and neither segment contains any ORVs as defined above. For this reason, we have determined that these segments are not eligible for designation as wild or scenic under the Wild and Scenic Rivers Act.

River or Stream Segment: Carlton Pond (Carlton Pond WPA)

Length: not applicable

Outstandingly Remarkable Values: None

Tentative Classification: Not applicable

Carlton Pond WPA is located near the town of Unity, in Waldo County, Maine. Carlton Pond is an impounded wetland, maintained by a water control structure placed at its outlet. Service jurisdiction is limited to lands surrounding the pond, and only includes a small segment of the stream at the pond’s inlet. There are no other known waterways on Service lands. Therefore, we do not consider any of the waters on refuge lands to be free-flowing. For this reason, we have determined that streams or stream segments within Carlton Pond WPA do not meet the minimum requirements for designation as wild or scenic under the Wild and Scenic Rivers Act.

River or Stream Segment: Sunkhaze Stream and its Tributaries

Length: 5 miles of stream, 16 miles of tributaries

Outstandingly Remarkable Values: Other Values (hydrologic quality, botanical)

Tentative Classification: Scenic

Sunkhaze Stream bisects the refuge along a northeast to southwest orientation and flows directly into the larger Penobscot River. The Sunkhaze Meadows Unit includes 5 miles of Sunkhaze Stream and another 16 miles of tributary streams that include Buzzy, Little Buzzy, Baker, Dudley and Johnson Brooks, and Birch and Little Birch Streams (see map D.1 and table D.1). Maine Department of Environmental Protection classifies Sunkhaze Stream and its tributaries as class AA waters. The State of Maine defines Class AA waters as “waters which have outstanding natural resources and which should be preserved because of their ecological, social, scenic or recreational importance. Sunkhaze Stream is a high order, relatively undeveloped stream, and this stream and its tributaries are currently listed in the NRI.

Table D.1. Lengths of stream and brook segments within the Sunkhaze Meadows Unit evaluated for eligibility under the Wild and Scenic Rivers Act.

Stream or Brook	Length (miles)
Sunkhaze Stream	5
Little Birch Stream	1.8
Birch Stream	2.6
Baker Brook	2.9
Buzzy Brook	2.4
Little Buzzy Brook	1.9
Johnson Brook	1.9
Dudley Brook	2.4
Total	20.9

Smithwood and McKeon (1999) divide Sunkhaze Stream into three types of riverine habitat. The lower section (treed river habitat) is characterized by a deep, wide, and heavily channelized part of the stream with a hardwood canopy that shades the stream. Submerged logs are abundant and emergent vegetation is moderate. The middle section, known as “bog meadow,” is a heavily channelized river surrounded by a tall grass meadow. This habitat comprises most of the unit from below the confluence of Baker Brook to an area above the confluence of Buzzy Brook. Farther upstream the river becomes increasingly narrow and shallow. The upper section (“upper Sunkhaze”) begins near the Buzzy Brook confluence and extends upstream to the unit’s boundary at Stud Mill Road. The lower part of this habitat has a series of beaver dams that create pools and slow runs. Upstream of the confluence with Johnson Brook the canopy closes in again, dominated by alders. The grade increases just below Stud Mill Road, creating shallow fast-moving water in a series of riffles, runs, and pools (Smithwood and McKeon 1999).

Along with its six tributaries, Sunkhaze Stream supports a diversity of wetland communities. The wetland complex consists primarily of wet meadows, shrub thickets, cedar swamps, extensive red and silver maple floodplain forests and open freshwater stream habitats, along with plant communities associated with peatlands, such as shrub heaths and cedar and spruce bogs. The complex contains several large raised bogs or domes, separated by extensive areas of streamside freshwater meadows. Davis et al. (1983) ranked the peat bogs of the Sunkhaze Meadows Unit high quality among 31 other peatlands in Maine based on its developmental-morphological diversity, pristine character, and exemplary quality of peatland type or feature. It is the second largest peatland in the State, with peat thickness ranging from 5 to 20 feet.

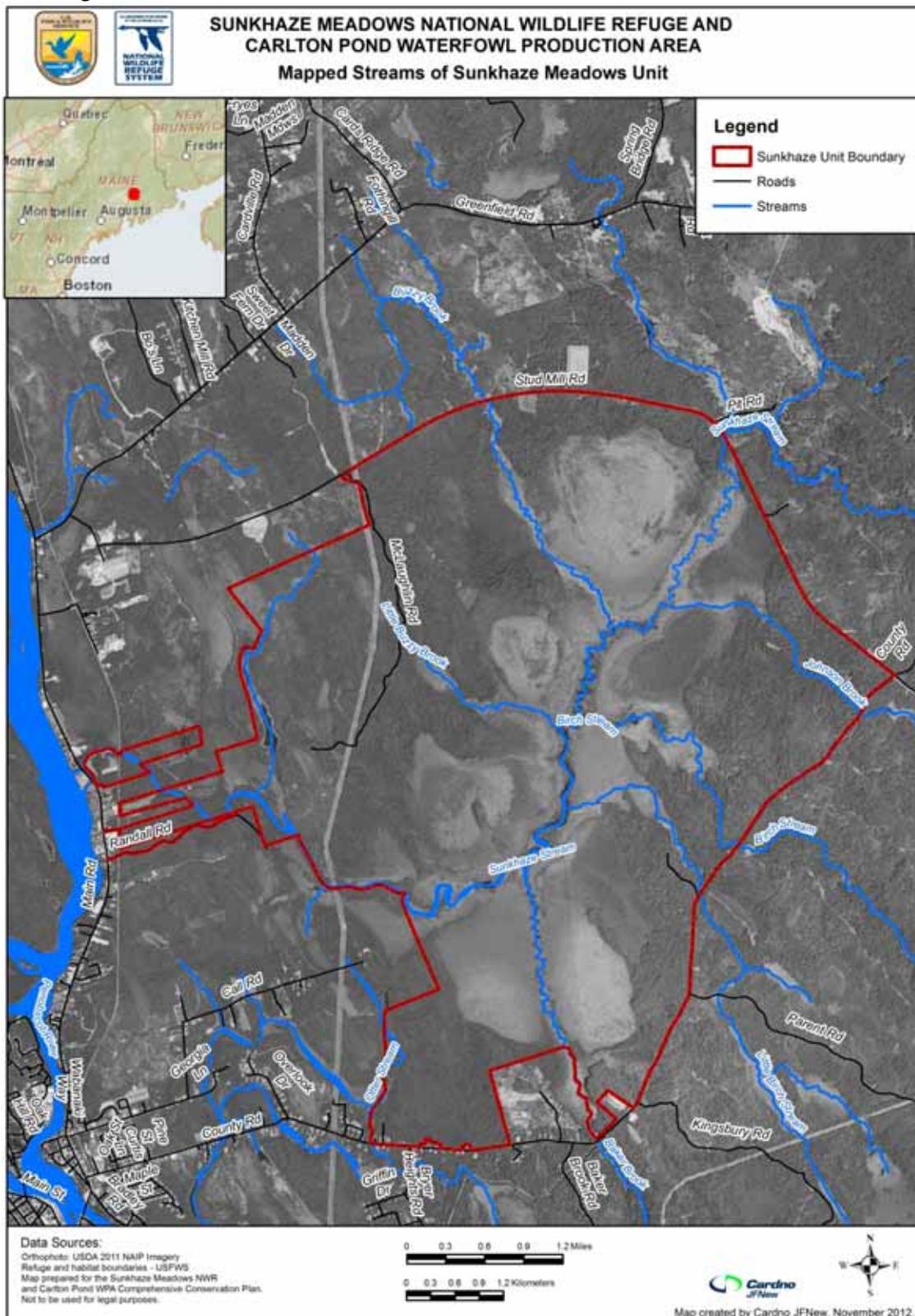
The bogs and stream wetlands, adjacent uplands and associated transition zones, also provide habitat for many wildlife species. Brook trout and American eel are native to the Sunkhaze Stream system. Beaver are especially abundant along Sunkhaze Stream and its tributaries, as evidenced by their lodges, dams, caches, and scent mounds. The wood turtle, a species of special concern in Maine, has been observed in the Sunkhaze Stream system.

While the unit is bordered by roads, the interior is largely undeveloped. There are relatively few trails and fewer roads because of the prevalence of bog and other wetland habitats. This, combined with seasonal flooding, has discouraged development of infrastructure along the stream and tributary shorelines both before the refuge was established and after acquisition. Therefore, the shorelines of these streams and creeks remain difficult to access by land and are largely undeveloped.

Conclusion

Because of the unique botanical resources associated with this stream system, its free-flowing nature, and its outstanding water quality, we have determined that Sunkhaze Stream and its tributaries within the refuge boundary are eligible for designation under the Wild and Scenic Rivers Act. Because of the relatively undeveloped nature of their banks and existing road access, we have tentatively classified these waters as scenic, based on the definitions established in the act. We will complete the suitability study and submit a recommendation, if applicable, after the CCP process is completed. The suitability study will be subject to additional public review under NEPA.

Map D.1. Streams within Sunkhaze Meadows National Wildlife Refuge determined to be eligible for designation under the Wild and Scenic Rivers Act.



Protective Management

Once a river or river segment is found eligible by an agency, the agency must evaluate any subsequent actions within its jurisdiction to ensure the actions do not affect potential wild and scenic river designation. Management activities and authorized uses must not adversely affect either the eligibility, or the tentative classification from a wild area to a scenic area or a scenic area to a recreational river area. In other words, for Sunkhaze Stream and its tributaries, we need to ensure that activities conducted under our jurisdiction do not affect the characteristics of the stream that make it eligible for designation. Under the conditions and restrictions specified in Sections 7(b), 8(b), 9(b) and 12(a) of the act, the river is protected for the duration of the study plus up to 3 years after the required report is submitted (along with the President's recommendation) to Congress. Should Congress not act within the 3-year timeframe, the river is no longer afforded protection by the act.

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

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

At this time, we do not believe it is necessary to establish any additional protective measures to protect the eligibility or ORVs of these waterways. None of the strategies presented in the CCP include management that will impede the free-flowing nature of these systems, their ORVs, or the tentative classification. As stated previously, we do not expect the results of the review process, or designation if it occurs, to affect any of the existing public uses or proposed habitat management of Service lands or waters. If, in the future, we determine that additional protective measures are necessary that would affect existing public uses, we will notify the public at least 30 days in advance of implementing the measures. At that time, we will provide opportunities for public comment on any proposed changes.

Literature Cited

- Diedrich, J. and C. Thomas. 1999. The Wild and Scenic River Study Process. Technical report prepared for the Interagency Wild and Scenic Rivers Coordinating Council. Prepared by the U.S. Forest Service Portland, Oregon and the National Park Service, Anchorage, Alaska. 54 pp. accessed November 2012 online at <http://www.gehwa.org/Wild%20&%20Scenic%20River%20Files/W&S%20study-process.pdf>
- Davis, R.B., G.L. Jacobson, Jr., L.S. Widoff, and A. Zlotsky. 1983. Evaluation of Maine peatlands for their unique and exemplary qualities. A report to the Maine Department of Conservation. Institute for Quaternary Studies and Department of Botany and Plant Pathology, University of Maine, Orono, Maine.

Smithwood, D.A. and J.F. McKeon. 1999. Sunkhaze Meadows National Wildlife Refuge fisheries management plan. U.S. Fish and Wildlife Service, Laconia, New Hampshire.