



Cable Connector Trail Environmental Assessment



Cable Connector Trail

Environmental Assessment

St. Croix National Scenic Riverway

Minnesota and Wisconsin

Estimated Lead Agency Total Costs Associated
with Developing and Producing this
Environmental Assessment: \$20,000

**CABLE CONNECTOR TRAIL
ENVIRONMENTAL ASSESSMENT
ST. CROIX NATIONAL SCENIC RIVERWAY
CABLE, WISCONSIN**

PROJECT SUMMARY

St. Croix National Scenic Riverway (SACN or “the Riverway”) is proposing to establish a 0.25-mile connector trail across National Park Service (NPS) land near Cable, Wisconsin. The trail would be open for hiking, trail running, and mountain bike and electronic-assist bike (e-bike) use, and silent sports such as fat-tire bicycling, snowshoeing, and cross-country skiing in the winter. It would be the first trail at the Riverway open to bike use. Construction of the trail would respond to a specific opportunity identified by the National Park Service and local partners to create a link across public land to provide direct access to the Riverway and new recreational opportunities both within the Riverway and on the Chequamegon Area Mountain Bike Association (CAMBA) trail network in Bayfield County.

This environmental assessment (EA) describes one action alternative (the proposed action) and the no-action alternative; it also analyzes the environmental consequences of implementing each alternative. Under the no-action alternative, the National Park Service would maintain the current conditions at the park. Under the proposed action, a 0.25-mile natural surface, multi-use trail connection would be built from the end of a segment of CAMBA’s Wild River Trail on an abandoned railroad grade near the Town of Cable, Wisconsin connecting to Parker Road. The trail would be built on NPS property. The proposed action would include the option for bicycle access to allow local residents and visitors legal access in and across the park lands on SACN Tract 04-143 and SACN Tract 04-145. The purposes of taking action are to reestablish a connection in a local trail system in order to ensure appropriate recreational opportunities in the Riverway, to facilitate use of the trail system in the Riverway and on adjacent lands, and to promote the health and well-being of visitors to the Riverway.

The National Park Service has consulted with the Wisconsin State Historic Preservation Office (SHPO) on potential effects to historic properties to comply with the requirements of Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (54 United States Code [U.S.C.] § 306108), and its implementing regulations (36 CFR Part 800). The outcome of this consultation is summarized in Table 2. In accordance with 36 CFR § 4.30 (NPS Bicycle Rule), the National Park Service will promulgate a bicycle rule to implement this project for the proposed multi-use trail.

Note to Reviewers and Respondents

Comments on this EA may be submitted electronically at the NPS Planning, Environment and Public Comment (PEPC) website (<http://parkplanning.nps.gov/sacn>), or you may mail written comments by October 23, 2020 to the address listed below. Before including personal identifying information in your comment, you should be aware that your entire comment (including your personal identifying information) may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Attn: Superintendent
St. Croix National Scenic Riverway
401 North Hamilton Street
St. Croix Falls, WI 54024

CONTENTS

Contents.....	iii
List of Tables	v
List of Figures.....	v
Acronyms and Abbreviations.....	vi
Chapter 1: Purpose and Need	1
1.1 Introduction	1
1.2 Purpose and Need for Action	1
1.3 Project Objectives.....	2
1.4 Planning Issues and Concerns	2
1.4.1 Planning Issues and Concerns Retained for Detailed Analysis.....	2
1.4.2 Planning Issues and Concerns Considered but Not Retained for Detailed Analysis	3
Chapter 2: Alternatives.....	6
2.1 Introduction	6
2.1.1 Overview.....	6
2.2 Alternative 1 (No-Action)	6
2.3. Alternative 2 (NPS Proposed Action and Preferred Alternative)	6
2.4. NPS Bicycle Rule Considerations	7
2.4.1 Bicycle Rule Requirements	7
2.4.2 Bicycle Use under Alternative 2	8
2.5 Monitoring Guidelines and Mitigation Measures for the Proposed Action.....	9
2.6 Alternatives Considered but Dismissed from Detailed Evaluation	11
Chapter 3: Affected Environment and Environmental Consequences.....	12
3.1 Introduction	12
3.2 Special Status Species	12
3.2.1 Affected Environment	12
3.2.2 Agency Coordination.....	13
3.2.3 Impacts of Alternative 1: No-Action.....	13
3.2.4 Impacts of Alternative 2: Proposed Action	13
3.3 Visitor Use and Experience.....	14
3.3.1 Affected Environment	14
3.3.3 Impacts of Alternative 1: No-Action.....	15
3.3.4 Impacts of Alternative 2: Proposed Action	15

Chapter 4: Consultation and Coordination	17
4.1 Introduction	17
4.2 Public Involvement.....	17
4.3 Consultation and Coordination with Other Agencies, Offices, and Tribes	17
4.3.1 Federal Agencies and Organizations	17
4.3.2 Federally Recognized American Indian Tribes Invited to Consult on this Undertaking.....	17
4.3.3 State Agencies and Organizations	18
4.3.4 Other Agencies, Organizations, and Entities	18
Chapter 5: Preparers, Partners, and Consultants	19
5.1 St. Croix National Scenic Riverway Interdisciplinary Team.....	19
5.2 NPS Midwest Regional Office (DOI Regions 3/4/5)	19
5.3 Other Partners and Consultants	19
Chapter 6: References	20

LIST OF TABLES

Table 1: Planning Issues Retained or Considered but Not Retained for Detailed Analysis	2
Table 2: Planning Issues and Concerns Considered but Not Retained for Detailed Analysis	3
Table 3: Cable Connector Trail Estimated Costs	9
Table 4: Project Design Criteria and Best Management Practices	9
Table 5: Determination of Effects for Federally Listed Species	14

LIST OF FIGURES

Figure 1: Existing Conditions and Proposed Action.....	5
--	---

ACRONYMS AND ABBREVIATIONS

ABA	Architectural Barriers Act
ADA	Americans with Disabilities Act
BMP	Best Management Practice
CAMBA	Chequamegon Area Mountain Bike Association
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulation
DNR	Department of Natural Resources
EA	Environmental Assessment
IDT	Interdisciplinary Team
IMBA	International Mountain Bicycling Association
IPaC	Information for Planning and Consultation
MA	May Affect
NE	No Effect
NEPA	National Environmental Policy Act of 1969
NHI	Natural Heritage Inventory
NHPA	National Historic Preservation Act of 1966
NLAA	Not Likely to Adversely Affect
NPS	National Park Service
PDC	Project Design Criteria
PEPC	Planning, Environment and Public Comment
SACN	St. Croix National Scenic Riverway
SCRA	St. Croix River Association
SHPO	State Historic Preservation Office
U.S.C.	United States Code
US	United States
USFWS	U.S. Fish and Wildlife Service
WSRA	Wild and Scenic Rivers Act

CHAPTER 1: PURPOSE AND NEED

1.1 INTRODUCTION

St. Croix National Scenic Riverway (often abbreviated the “Riverway” or “park” in this document) is located in northwest Wisconsin and eastern Minnesota and is a unit of the national park system administered by the National Park Service (NPS).

Relatively free-flowing and unpolluted, the Namekagon and St. Croix Rivers flow through some of the most scenic and least developed country in the Upper Midwest. In 1968, Congress established the St. Croix National Scenic Riverway, a 230-mile long park that includes the Namekagon River, as one of the original eight rivers protected under the national Wild and Scenic Rivers Act (WSRA). In 1972, the Lower St. Croix National Scenic Riverway was added to the system.

The purpose of the St. Croix National Scenic Riverway is to preserve, protect, and enhance the values of the St. Croix and Namekagon rivers and their immediate environment for the benefit and enjoyment of present and future generations. The values for which the Riverway has been designated as a wild and scenic river are its free-flowing character, exceptional water quality, and the aquatic, riparian, recreational, cultural/historic, geologic, scenic, and aesthetic values present in the rivers.

Visitors access the Riverway at more than 60 landings in two states, along 230 miles of the St. Croix and Namekagon rivers. The valley has a distinct feel, and the river towns add to that character. The park and state partners have worked with local communities to implement zoning regulations to maintain this character and maintain the scenic and aesthetic experience of users and visitors.

Connectivity in and near the Riverway is an important component of the park purpose to provide access and opportunities for the benefit and enjoyment of visitors. Approximately 15 river miles south of the northernmost section of the park (the Namekagon Dam Landing area), there is a local trail system near the Town of Cable where connectivity between the Riverway and other public lands and trails has been disrupted due to private landowner decisions.

1.2 PURPOSE AND NEED FOR ACTION

The NPS proposed action is to construct a 0.25-mile natural surface, multi-use trail connection from the end of a segment of CAMBA’s Wild River Trail on an abandoned railroad grade near the Town of Cable, Wisconsin connecting to Parker Road. The trail would be open for hiking, trail running, and mountain bike and e-bike use in the summer, and silent sports such as fat-tire bicycling, snowshoeing, and cross-country skiing in the winter. It would be the first trail at the Riverway open to bike use and would also facilitate the use of non-National Park Service trails nearby.

The purposes of taking action are to reestablish a connection in a local trail system in order to ensure appropriate recreational opportunities in the Riverway, to facilitate use of the trail system in the Riverway and on adjacent lands, and to promote the health and well-being of visitors to the Riverway.

1.3 PROJECT OBJECTIVES

Objectives are more specific statements of purpose that provide additional basis for comparing the effectiveness of alternatives in achieving the desired outcomes of the action (NPS 2015). The following objectives were identified by the planning team for this project:

- Develop a multi-use trail to enhance visitor experience and safety while protecting natural and cultural resources
- Accommodate different types of trail use, including hiking and biking, and reduce maintenance by using sustainable trail construction techniques and minimizing park infrastructure
- Provide connectivity through the Riverway in a region with numerous trails and open lands, allowing for legal access through the park unit to other trail networks

1.4 PLANNING ISSUES AND CONCERNS

The NPS, stakeholders, and members of the public identified specific issues and concerns pertinent to the proposed action. Some of these issues and concerns were considered by the NPS but were ultimately dismissed from further analysis because they were determined not central to the proposal or of critical importance. Other issues and concerns were retained for detailed analysis and are included in the impact topics that are discussed in Chapter 3: Affected Environment and Environmental Consequences of this EA. Two impact topics dealing with these issues were retained for detailed analysis: Species of Concern and Visitor Use and Experience.

TABLE 1: PLANNING ISSUES RETAINED OR CONSIDERED BUT NOT RETAINED FOR DETAILED ANALYSIS

Level of Analysis	Planning Issues and Concerns
Retained for Detailed Analysis	<ul style="list-style-type: none"> • Special Status Species • Visitor Use and Experience
Considered but Not Retained for Detailed Analysis	<ul style="list-style-type: none"> • Cultural Resources • Geologic Resources • Water Resources • Wild and Scenic Rivers • Acoustic and Visual Resources • Air Quality • Vegetation • Wildlife • American Indian Trust Resources • Socioeconomic Impacts • Environmental Justice

1.4.1 Planning Issues and Concerns Retained for Detailed Analysis

Special Status Species. One federally listed mammal may be impacted by the proposed action: northern long-eared bat (*Myotis septentrionalis*, threatened). No critical habitat for northern long-eared bat is present in the park. Construction and maintenance of the proposed trail, specifically removal of trees posing a safety hazard to trail users, may impact potential habitat for the northern long-eared bat. There are three other federally listed species in Bayfield County, though no impacts on those species are expected. Habitat for one Wisconsin state listed species, the wood turtle (*Glyptemys insculpta*), may be present in the project area. Therefore, the impact on special status or their habitat has been carried forward for further analysis in the Section 3.2 – Special Status Species.

Visitor Use and Experience. The proposed action would add a new 0.25-mile trail segment to the park trail system, altering existing recreation uses and opportunities. In particular, the addition of bicycle use on the proposed trail segment would have impacts on park resources and management. Bicycle use is currently not authorized on existing park trails. The proposed action should be consistent with the NPS Bicycle Rule found in 36 CFR § 4.30. Therefore, visitor use and experience, including bicycle use, has been carried forward for detailed analysis and evaluated in Section 3.3 – Visitor Use and Experience.

1.4.2 Planning Issues and Concerns Considered but Not Retained for Detailed Analysis

Some resource impact topics that are commonly considered during the planning process were dismissed from detailed analysis either because the proposed action alternative would have no effect or minimal effects on the resource, or because the resource is not present in the action areas. The rationale for not retaining these specific topics is stated for each topic. Project-specific best management practices (BMPs) and project design criteria (PDC) can be found in Chapter 2 – Alternatives.

TABLE 2: PLANNING ISSUES AND CONCERNS CONSIDERED BUT NOT RETAINED FOR DETAILED ANALYSIS

Level of Analysis	Rationale for Dismissal from Detailed Analysis
Cultural Resources	Field surveys for cultural resources were completed in summer 2020. The results of this archeological investigation indicate that Cable Connector Trail construction and bollard installation will not adversely impact important archeological resources. No additional archeological work is recommended in advance of Cable Connector Trail construction going forward as proposed, assuming compliance with the Section 106 review process (NPS 2020). The NPS determined that <i>No Historic Properties would be Affected</i> by this undertaking and consulted with the Wisconsin State Historic Preservation Office (SHPO) pursuant to 36 CFR Part 800. The SHPO concurred with the federal agency’s finding of effect on 9/15/2020. Project-specific BMPs and PDC have been included in Table 4 in the event that unanticipated historic or archeologic resources are discovered during construction of the proposed trail.
Geologic and Soil Resources	Geologic resources, such as caves, karst, unique geologic formations, and mining and extractive resources are not present in the project area. Impacts to soils are anticipated to be minimal and limited to the project area and construction zone. Impacts would be consistent with impacts to soils on other non-NPS trails nearby. Mitigation measures to reduce long-term impacts on soils are included in Table 4.
Water Resources	No floodplains or wetlands are located in the project area. Neither water quality nor water quantity would be affected by the proposed action. Construction and use of the proposed multi-use trail would have no impacts on the Namekagon River, wetlands, or floodplains.
Wild and Scenic Rivers	The proposed trail would not require a WSRA Section 7(a) Determination because the trail is not located below the ordinary high-water mark of the Namekagon River and the proposed trail does not meet the definition of a water resources project. No permit from the Army Corps of Engineers under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act would be necessary.
Acoustic and Visual Resources	Seeing and hearing other visitors and recreational uses is consistent with the purposes and current recreational use at the Riverway. Impacts from the proposed action would not have more than minimal impacts on acoustic and visual resources. Short-term impacts on the natural soundscape are likely during the construction phase of the project but would cease once the project is complete. These impacts are anticipated to be small and short in duration and limited to daylight hours when construction may occur. Long-term acoustic impacts are expected to be negligible and consistent with ongoing uses in the area. With the proposed addition of bicycle use on the proposed trail, there may be an increase in human-created sounds but bicycles themselves, including e-bikes, produce negligible to minor short-term sounds. Noise caused by human activity on nearby existing trails would not change appreciably because of the proposed action. Views in the project area would change to a small degree with the construction of the proposed trail but would be consistent

	with other existing trails in the immediate vicinity and throughout the park and community. The view from the Namekagon River would not be impacted by the proposed action.
Air Quality	Air quality impacts are expected to be negligible during the construction phase. Dust and airborne soil may affect localized air quality during the construction period, limited to less than 100 feet around construction zones. Small equipment such as mini-excavators, skid steer, or small bulldozers may be used during construction, which would generate a negligible amount of greenhouse gas emissions for a short duration. In the long-term, air quality impacts are expected to be negligible, as the use on the trail would be limited to bicycle and pedestrian use. Additionally, minimal dust or airborne soil particles are expected to be generated or remain suspended in air because of visitors riding bicycles on the trail.
Vegetation	The predominant vegetation type in the area of trail construction is upland mixed hardwood and conifer forest, with an understory of forbs and sedges. Some individual plants and trees would be disturbed and/or removed during construction, use, and maintenance of the trail. Overall impacts to the vegetation community in the project area would be long-term but minimal, with expected seasonal use of the trail. Project-specific BMPs and PDC (see Table 4) will minimize impacts to native vegetation and reduce the likelihood of introduction or spread of nonnative plants.
Wildlife	The project area already receives regular human activity, as pedestrians use the nearby trails and the Riverway is frequented by a variety of user groups. Additional human use is not expected to have more than minimal impacts on wildlife, even with bicycle travel on the proposed trail. During trail construction, additional care would be taken to mitigate impacts on wildlife such as disturbance of the natural soundscape. Therefore, wildlife and wildlife habitat have been dismissed from detailed analysis, but project-specific BMPs and PDC (see Table 4) will minimize impacts to wildlife and wildlife habitat.
American Indian Trust Resources	No lands held in trust for the benefit of Indians are located in the vicinity of the project. Similarly, the lands comprising the park are not held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians.
Socioeconomic Impacts	The proposed action is unlikely to have socioeconomic impacts on the park or nearby communities. The proposed trail would re-establish a prior trail connection in the area and permit bicycle used as an authorized activity on the proposed trail. Impacts to local and regional income and employment and commercial benefits from these modest changes in use are expected to be negligible, except that more visitors may come to the park and current visitors would benefit from expanded recreational opportunities. In the event the park receives an application for special use permits for foot or bicycle races, it is possible having the trail in this location would generate short-term injections of financial resources into the neighboring communities and small businesses.
Environmental Justice	Equal consideration was given to all public input from persons regardless of age, race, income status, or other socioeconomic or demographic factors; the proposed action would not result in any identifiable adverse human health effects; the proposed action would not disproportionately affect any minority or low-income population or community; and the proposed action would not result in any identified effects that would be specific to any minority or low-income community.

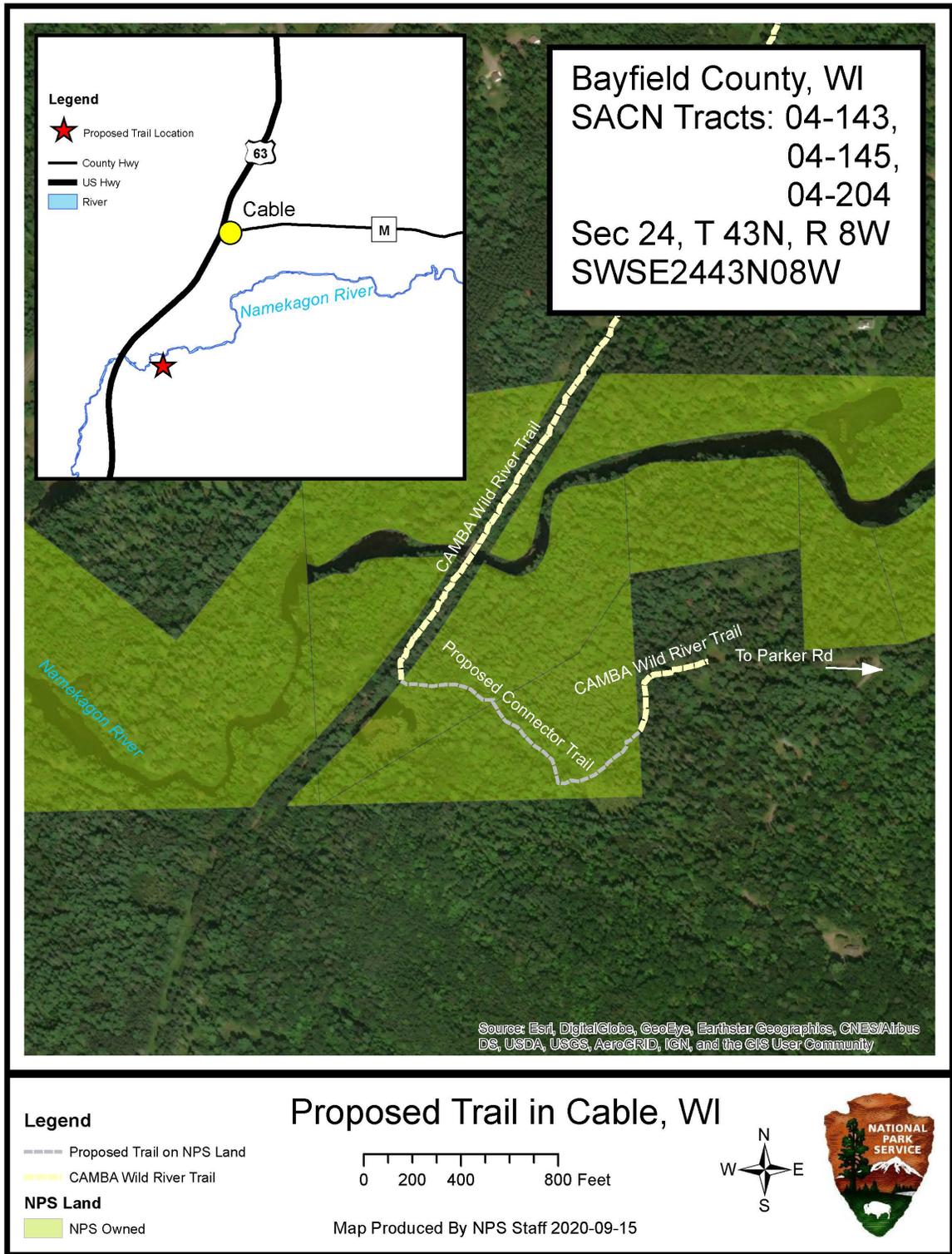


FIGURE 1: EXISTING CONDITIONS AND PROPOSED ACTION

CHAPTER 2: ALTERNATIVES

2.1 INTRODUCTION

2.1.1 Overview

This Cable Connector Trail Environmental Assessment presents two alternatives for future trail opportunities at the park. The two alternatives are alternative 1, to continue current management (the no-action alternative) and alternative 2 (the proposed action). Impacts associated with the actions proposed under each alternative are outlined in Chapter 3: Affected Environment and Environmental Consequences of this EA.

2.2 Alternative 1 (No-Action)

No new trails or facilities would be developed on federal lands in the project area under the no-action alternative. Visitors would continue to access public lands but would not have the opportunity to connect to other trails in this location. Bicycle use would remain prohibited on all park trails under the no-action alternative.

2.3. Alternative 2 (NPS Proposed Action and Preferred Alternative)

Under alternative 2, a 0.25-mile natural surface, multi-use trail connection would be built from the end of a segment of CAMBA's Wild River Trail on an abandoned railroad grade near the Town of Cable, Wisconsin connecting to Parker Road. The trail would be built on NPS property. A multi-use, natural surface trail (mineral soil) of a gentle grade, not exceeding 5%, would be constructed for hiking, biking (including road, mountain, and e-bikes), and trail running during the spring, summer and fall; and during winter months, fat-tire bicycling, snowshoeing, and possibly cross country skiing. No equestrian or other motorized uses would be permitted, except for authorized vehicles used for trail maintenance, emergency services and NPS-permitted special events. The trail would provide a critical link to adjoining trails and would serve an important role providing connectivity for several local trail running and biking events that start or finish in the downtown Cable area. The trail would not be accessible per the legal standards of the Americans with Disabilities Act/ Architectural Barriers Act (ADA/ABA). However, the intent of the trail is to provide a flat, "easy" trail that would be accessible for a wide range of pedestrian and bicycle users.

The proposed trail would connect to a multi-use trail on a former railroad grade. The existing multi-use trail includes a 100-foot long bridge span over the Namekagon River constructed in 1893. The bridge is in serviceable condition and presents neither a major constriction nor an impediment to the free-flowing condition of the river. The majority of the multi-use trail and bridge are owned by Bayfield County, Wisconsin, with short segments owned by the Town of Cable and private ownership.

The proposed action was identified by the National Park Service through their partnership with the Chequamegon Area Mountain Bike Association (CAMBA), which approached the NPS asking for a connection across NPS land. The proposed trail would serve as part of an entry-level mountain biking trail in the CAMBA network. CAMBA has robust experience establishing trails, including trails on Bayfield County property adjacent to St. Croix National Scenic Riverway.

Public input was important in the development of this proposal. Feedback and ideas from CAMBA, local government representatives, and the general public helped the planning team understand the

public's values, preferences, concerns, issues, and suggestions regarding visitor experiences and recreation opportunities within the park.

Allowing bicycle use on a new trail within the Riverway is consistent with the direction in Secretary's Order 3366, "Increasing Recreational Opportunities on Lands and Waters Managed by the U.S. Department of the Interior," directing the National Park Service to enhance access to and develop new recreational opportunities on NPS-managed public lands.

Importing material and the construction of boardwalks are not anticipated. Organic material would be removed from the surface to expose mineral soil and graded to provide proper drainage. Because the terrain is generally flat, the trail would require a slight crown to properly drain. The overall level of difficulty of the trail would be considered "easy," with no technical trail features or unavoidable obstacles. The width of the trail itself, (known as "tread width") would be approximately 4 feet, while obstacles that are a safety hazard, such as long tree branches, may be removed up to a width of 8-10 feet in specific locations. The trail would follow a wide swath of higher ground bounded on the north and south by wetlands. The trail corridor would be sited a minimum of 30 feet from the wetlands. The terrain for most of the trail corridor is very moderate with few inclines. The final 50-75 yards at the east end of the proposed trail (where the proposed trail would meet the old logging road) would require bench cut construction to descend at a gradual grade along the side of a hill.

The International Mountain Bicycling Association (IMBA) guidance for trail design and construction (IMBA 2017) and project-specific BMPs and PDC would guide trail design, construction, and maintenance. Trail construction would employ sustainable trail construction techniques and best practices as recommended by IMBA. Most of the construction would be accomplished using small equipment such as mini-excavator, skid steer or small bulldozer with a less than 10-foot blade. Finishing work using hand tools would clean and finalize the trail tread and edges. Trail design considerations would include minimizing user conflicts, ensuring user safety with open sight lines, gentle turns and employing strategies to best accommodate speed differentials between different user groups. Corners would not be bermed to improve traction for bicycles. The multi-use trail would utilize landforms and natural features exhibiting the natural beauty of the area. Other design considerations include following natural contours and avoiding large trees and rocks and including points of interest. A small pull-out would be developed near the west end of the trail to provide a scenic overlook of a small bog pond. Bollards may be installed at both ends of the trail. The trail itself would cover 0.23 acre of park land, with up to an additional 0.23 acre of clearing along the sides of the trail. The total acreage of the trail would be 0.46 acre or less.

Construction would be undertaken by CAMBA, the local mountain biking and cycling advocacy organization, a 501(c)(3) non-profit organization. CAMBA has a long history of working with local land managers to develop and maintain sustainable recreational trails and carries \$1 million in liability insurance. Costs are estimated at \$5,000 not including signage, with considerable in-kind labor and equipment donations anticipated. Funding would be provided by CAMBA and local donors.

2.4. NPS BICYCLE RULE CONSIDERATIONS

2.4.1 Bicycle Rule Requirements

The action alternative must comply with 36 CFR § 4.30 (the Bicycle Rule), which contains regulations that manage bicycle use within national park system units.

The Bicycle Rule requires a special regulation to authorize bicycle use on new trails outside of developed areas. Prior to doing so, a planning document must evaluate the suitability of existing trail surfaces and soil conditions for accommodating bicycle use, including any maintenance, minor rehabilitation, or armoring that would be necessary to upgrade the trail to sustainable condition.

Lifecycle maintenance costs, safety considerations, strategies to prevent or minimize user conflict, and methods to protect natural and cultural resources and mitigate impacts also must be analyzed. An EA or environmental impact statement must be completed evaluating the effects of bicycle use in the park and on the specific trail. An EA must provide for a 30-day comment period. If there is a finding of no significant impact, the superintendent must then provide a written determination that the addition of bicycle use on the existing trail would be consistent with the protection of the park area's natural, scenic and aesthetic values, safety considerations, and management objectives and would not disturb wildlife or park resources, as well as obtain written approval from the regional director.

New trails requiring construction activities would be developed and constructed in accordance with sustainable trail design principles and guidelines. CAMBA would rely on International Mountain Bicycling Association (IMBA) trail construction guidance (IMBA 2017) and local trail-building experience on public lands for construction and maintenance.

The Bicycle Rule also addresses bicycle use on administrative roads that are closed to motor vehicle use by the public, but open to motor vehicle use for administrative purposes. The Bicycle Rule requires that bicycle use may be authorized on administrative roads upon a written determination that such bicycle use is consistent with protection of the park area's natural, scenic and aesthetic values, safety considerations and management objectives, and would not disturb wildlife or park resources. The Bicycle Rule allows the use of bicycles on park roads that are open for motor vehicle use by the general public.

2.4.2 Bicycle Use under Alternative 2

Alternative 2 would allow bicycle use on the proposed Cable Connector Trail, which would require trail construction activities. No additional roads or trails in the park would be designated for bicycle use under alternative 2, and alternative 2 does not include other modifications to any existing park trails. The Cable Connector Trail would be considered a new trail under the Bicycle Rule.

The NPS considered the proposed multi-use trail's consistency with the parameters of the Bicycle Rule in this EA. The superintendent has determined that construction of the Cable Connector Trail is consistent with the Bicycle Rule and would have important benefits for recreation and visitor experience, and localized, minor impacts on natural resources in the park.

According to the Bicycle Rule, the NPS must evaluate the suitability of the trail surface and soil conditions for accommodating bicycle use. If well designed, built, and maintained, a sustainable trail minimizes braiding, seasonal muddiness, and erosion. This EA incorporates a sustainable trail design for the proposed multi-use trail under alternative 2.

Park planning documents must consider the cost of initial construction as well as ongoing maintenance in the park. As such, a lifecycle cost estimate by trail segment and type for alternative 2 was developed and includes general annual maintenance costs and planning level cost estimates. The cost estimate, provided by CAMBA based on prior trail construction experience, includes assumptions to account for uncertainties at this stage in the planning process, including a 10%

contingency cost. As described above, funding for construction of the proposed multi-use trail included in alternative 2 would be provided by CAMBA and other donors. Funding for maintenance of the trail would be the responsibility of CAMBA with support from community volunteer groups. Table 3 provides a summary of the cost estimate conducted for the proposed multi-use trail that would be constructed under alternative 2.

TABLE 3: CABLE CONNECTOR TRAIL ESTIMATED COSTS

Expense Type	Distance (miles)	Estimate	Contingency (10%)	Total*
One-time construction costs	0.25	\$5,000	\$500	\$5,500
Annual NPS operating and maintenance costs	0.25	\$500	\$50	\$550

*The majority of the cost of construction and trail maintenance would be funded by CAMBA and volunteers.

2.5 MONITORING GUIDELINES AND MITIGATION MEASURES FOR THE PROPOSED ACTION

Congress has charged the NPS with managing the lands under its stewardship “in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (NPS Organic Act, 54 U.S.C. § 100101(b) et seq.). As a result, the NPS routinely evaluates resources and implements mitigation measures whenever conditions are present that could adversely affect the sustainability of national park system resources.

Table 4 details PDC and best management practices (BMPs) incorporated into alternative 2 in order to minimize potential adverse impacts from construction and implementation of the proposed action. The PDC and BMPs are considered part of, and therefore required elements of, the proposed action.

PDC and BMPs come from federal, state, and local laws, regulations, and policies; NPS professional and scientific recommendations; or from experience in implementing similar projects. The bulk of the PDC and BMPs provided in Table 4 are considered common practices for trail construction projects to prevent or decrease potential resource impacts (see also IMBA 2017). They are highly effective methods that can be planned and adapted to site conditions as needed. The potential effects of implementing the proposed action (disclosed in Chapter 3) are disclosed under the assumption that these PDC and BMPs are applied.

TABLE 4: PROJECT DESIGN CRITERIA AND BEST MANAGEMENT PRACTICES

Project Phase	PDC and BMPs
General (Applies to All Phases)	<ul style="list-style-type: none"> • The trail shall be designed and constructed using natural topography to provide adequate drainage. Due to the naturally flat terrain in the project area, a slight crown will be required to ensure adequate drainage. • The trail may be managed with seasonal closures as needed to avoid the development of ruts when soils are saturated. • The proposed multi-use trail shall be designed and constructed to drain runoff away from wetlands and water bodies. • To provide for proper drainage, the trail shall not be routed near the bottom of ephemeral draws or other low spots. • Vegetative buffers of approximately 20 feet shall be maintained adjacent to intermittent or perennial drainages and wetland areas. • To reduce the possibility of spreading oak wilt, NPS staff will be consulted on the timing of cutting and pruning oaks in the project area. • All equipment and vehicle washing will be performed off-site. • If undocumented historic or archeologic resources are located during planning activities or construction activities, all construction in the immediate vicinity shall

	<p>cease, the NPS shall be notified, and properties shall be treated as specified in 36 CFR Part 800, Protection of Historic Properties.</p> <ul style="list-style-type: none"> • If any previously undocumented threatened, endangered, proposed, or candidate species are encountered within the project area prior to or during project implementation, the NPS shall be notified. The NPS shall develop suitable protection measures to avoid or minimize impacts as appropriate.
Pre-Construction	<ul style="list-style-type: none"> • A site visit of the project design shall occur by NPS staff and CAMBA partners before construction may begin. • NPS staff shall provide noxious weed management guidelines for use by CAMBA or their contractor or volunteers prior to implementation of any ground-disturbing activities. • NPS staff, contractor, and partners shall determine appropriate means of erosion control during pre-construction site visit. • NPS staff shall inspect all off-road equipment prior to entering NPS lands to ensure that they are free of soil, seeds, vegetative matter, or other debris that could contain or hold noxious weed seeds. "Off-road equipment" includes all construction machinery, except for trucks, service vehicles, water trucks, pickup trucks, cars, and similar vehicles. • Prior to commencement of any earthwork, flagging will be located on the site to ensure that machine-operated activity is focused on targeted areas only. "Leave trees" and trail clearing limits shall be adequately marked. • NPS staff shall train contractor and partners on identification of species of concern such as long-eared bat and wood turtle and provide guidelines on suitable plan of action should they be encountered.
During Construction	<ul style="list-style-type: none"> • International Mountain Bicycling Association trail-building guidelines shall be followed when constructing the trail. • Straight edges shall be avoided where possible when removing trees. Variable density cutting (feathering) and age and size class selection shall be utilized to create a more natural edge that blends into the existing vegetative structure. • Stumps in the trail tread and trail clearance corridor shall be cut as low as possible to the ground to avoid safety hazards. • All construction activities shall be confined to daylight hours, excluding emergencies. • Construction activities will be halted while the ground is saturated. • Restrict the removal of snags and coarse woody debris to those necessary to meet safety standards. Leave other snags and woody material on-site to benefit species dependent upon these habitat structural elements. Snags and nest trees identified during pre-construction wildlife surveys (conducted as needed) will be retained, unless they pose a hazard to human health; then they will be retained until the end of the nesting period if potentially occupied. • All hazardous waste materials such as oil filters, petroleum products, and equipment maintenance fluids will be stored in structurally sound and sealed containers in the hazardous materials storage area and segregated from the other nonwaste materials. Secondary containment will be provided for all materials in the hazardous materials storage area and will consist of commercially available spill pallets. Additionally, all hazardous materials will be disposed of in accordance with federal, tribal, and state regulations. All personnel will be instructed, during tailgate training sessions, regarding proper procedures for hazardous waste disposal. Notices that state these procedures will be posted and the individual who manages day-to-day site operations will be responsible for seeing that these procedures are followed. • Any waste generated will be properly disposed of in a temporary trash bin located on-site and hauled off promptly at site closure. All outdoor trash containers and locations with food residue shall be bear proof. All food products stored outside of a building shall also utilize bear proof food containers. No food products or food containers shall be disposed of in larger roll-off type dumpsters. • Construction equipment and maintenance materials will be stored at the staging area. Nonhazardous materials such as silt fencing, tools, etc. will be stored in plastic containers within the storage area. • No food or drink shall be stored overnight in construction vehicles on site. All windows shall be kept closed and doors locked on all vehicles to prevent wildlife entry.

	<ul style="list-style-type: none"> • All major equipment and vehicle fueling and maintenance will be performed off-site. A fuel tank will be kept off-site at a staging area. Minor equipment maintenance only will occur on-site. Drums, stored on spill pallets, will be used to store any equipment fluids generated from maintenance activities. Absorbent, spill-cleanup materials, and spill kits will be located at the staging area. All equipment receiving maintenance and vehicles and equipment parked overnight will have drip pans placed beneath them. • Workers shall not bring dogs or other pets on NPS lands during construction.
Post-Construction	<ul style="list-style-type: none"> • Trail edges will be promptly revegetated upon completion of trail construction with a native seed mix approved by NPS staff. • The trail shall have appropriate signage to inform users of permitted activities and reduce user conflicts. A sign plan shall be reviewed and approved by NPS staff prior to installation of signage. • NPS staff shall be notified if unauthorized trails are developed by third parties. These trails shall be promptly deconstructed and reclaimed under NPS guidance. • Some of the slash generated from tree-removal operations may be mulched, and the mulch applied to the surface of disturbed areas for both temporary and permanent stabilization. Invasive vegetation shall not be mulched and spread when it is in seed. • Downed woody debris resulting from construction activities should not be left in place due to concerns about fuel loading and potential for exacerbated wildfire impacts. • All areas disturbed by construction shall be re-vegetated with native plant species using an NPS-approved seed mix and shall meet ground cover standards within three years after completion of project construction. All mulch used in re-vegetation efforts shall be certified to be free of weed species. • Noxious weed infestations shall be monitored and treated for three years after project completion or until weed populations meet target thresholds. All contractors, chemicals, and methods shall be approved by NPS staff. • Annual trail maintenance shall include monitoring and maintenance of drainage features, as necessary. Monitoring of these features shall also occur during construction to ensure that impacts are minimized, and drainage management is implemented. • If requested by the NPS or CAMBA, a post-construction site visit will be convened.

2.6 ALTERNATIVES CONSIDERED BUT DISMISSED FROM DETAILED EVALUATION

No additional alternatives were proposed by the public or staff that warranted additional consideration.

CHAPTER 3: AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 INTRODUCTION

This chapter describes the affected environment, which is intended to document the existing conditions of the park. These descriptions serve as a baseline for understanding the resources that could be impacted by implementation of the proposed action. This chapter also includes an analysis of the environmental consequences or “impacts” of the no-action alternative and alternative 2 immediately following the affected environment descriptions for each resource topic. The resource topics presented in this section correspond to the environmental issues and concerns described in Chapter 1: Purpose and Need.

The methods used to assess impacts vary depending on the resource being considered but generally are based on a review of pertinent literature and park studies, information provided by on-site experts and other agencies, professional judgment, and park staff knowledge and insight.

The following terms are used in the discussion of environmental consequences to assess the impact intensity threshold and the nature of impacts associated with each alternative.

Type. Impacts can be beneficial or adverse. A beneficial impact is an impact that would result in a favorable change in the condition or appearance of the resource. An adverse impact is an impact that causes an unfavorable result to the resource as compared with the existing conditions.

Potentially Affected Environment, Potential Impacts, and Degree of Impacts. The impacts of an action must be analyzed in several contexts as appropriate and can include anything from a national to a park-specific area. Actions would seek to avoid or minimize impacts, but where that is not possible, mitigation measures can be used to reduce the degree of adverse impacts. Within the potentially affected environment, other relevant reasonably foreseeable actions can also be considered. Each impact topic analyzed is done so in context of the potentially affected environment. Potential impacts and the degree of those impacts are discussed, and where relevant stipulations and mitigations are suggested to avoid or minimize adverse impacts.

Duration. Duration of impact is analyzed independently for each resource because impact duration is dependent on the resource being analyzed. Impacts may last for the implementation period, a single year or growing season, or longer. Impact duration is described as short-term, long-term, or permanent for each resource. For the purposes of this analysis, short-term and long-term impacts are defined for each resource.

3.2 SPECIAL STATUS SPECIES

3.2.1 Affected Environment

One federally listed species (northern long-eared bat) found in the park may be impacted by the proposed action. Three other federally listed species are found in Bayfield County, WI and may be present in the park, but would not be affected by the proposed action (Canada lynx, gray wolf, and Fassett’s locoweed).

Northern long-eared bat (*Myotis septentrionalis*) is a federally listed threatened mammal that may be present in project area. These bats use caves and mines as hibernacula in winter, especially locations with small crevices and cracks. Summer habitats for the northern long-eared bats include trees, caves, and mines. They exhibit a preference for roosting locations on trees exhibiting crevices,

cavities, and bark that is retained throughout the season. Like many other bats, they are threatened due to white-nose syndrome in particular; some areas have experienced declines of 99% of their population. They also are threatened by reductions in available habitat and mortality from wind turbines (Wisconsin DNR 2017; USFWS 2020a; USFWS 2020b).

Wood turtle (*Glyptemys insculpta*) is a Wisconsin state listed threatened species with known habitat near the project area. Wood turtle habitat includes rivers and streams with upland deciduous forest and nearby wetland areas similar to that found in the project area. They are most active from spring into early fall, with nesting activities in May and June usually within 200 feet of a river or stream (Wisconsin NHI 2020).

3.2.2 Agency Coordination

To understand possible impacts of the proposed action on special status species, the extent of habitat loss, and disturbance (both short- and long-term) were considered. Species profiles and other pertinent information from the U.S. Fish and Wildlife Service (USFWS) and Wisconsin Department of Natural Resources and Natural Heritage Inventory were gathered to provide a general assessment of likely habitat in the project area.

Additional language was included below to provide effects determinations so that this environmental assessment could also meet the obligations of the NPS under Section 7 of the Endangered Species Act. This will allow park staff to use this document for consultation with USFWS biologists if needed. See Table 5 for a summary of Section 7 determinations for federally listed species.

3.2.3 Impacts of Alternative 1: No-Action

Under the no-action alternative, the proposed action would not be undertaken. There would be no effects of trail construction, use, or maintenance on species of special concern.

3.2.4 Impacts of Alternative 2: Proposed Action

Under the proposed action, vegetation removal would occur for the development of the multi-use trail tread (0.23 acre) and in some locations, a wider area for safety (approximately 0.23 acre), for up to a total 0.46 acre. Trees and other larger vegetation would be preserved whenever possible, but both live and dead trees may be removed during construction. Hazard tree removal (e.g., dead or dying trees that have fallen across the trail) would occur during trail maintenance to provide a safe, obstacle free trail for human use.

Tree removal during trail construction and likely future hazard tree removal therefore may reduce the number and type of trees available for northern long-eared bat. Tree removal would have a long-term adverse impact on bat habitat in the park. This impact is expected to be minimal because it would be localized to the trail and trail clearance corridor and would only constitute a small number of trees compared to the number of trees in and near the project area. There are existing social trails as well as designated trails in the vicinity of the proposed action. The proposed action would add negligible to minor additional impacts on northern long-eared bat with respect to available habitat and ongoing human activities, such as park vegetation management and recreational uses. The project *may affect but is not likely to adversely affect northern long-eared bats* in the action area. Population-level impacts to these bats would not occur from the proposed action.

No impacts are anticipated on the three other federally listed species that may occur in the park: gray wolf, Canada lynx, and Fasset's locoweed.

Wood turtle habitat, present in the project vicinity, may be impacted by construction activities and future trail use and maintenance (Wisconsin NHI 2020). Guidance for the protection of this species is described in the Wood Turtle Broad Incidental Take Statement (Wisconsin DNR 2016), which would be adhered to by NPS staff, contractors, and volunteers in the event of possible impacts on wood turtles.

Overall, impacts to the federally listed northern long-eared bat and state listed wood turtle would be minimal and would be further mitigated with PDC and BMPs to protect their habitats during construction, maintenance, and use of the proposed trail (see Table 4).

Endangered Species Act / Section 7 Effect Determination Summary

The proposed action may affect but is not likely to adversely affect northern long-eared bat at St. Croix National Scenic Riverway (see Table 5). Population-level impacts would not occur. No effects to other federally listed species would occur.

TABLE 5: DETERMINATION OF EFFECTS FOR FEDERALLY LISTED SPECIES

Common Name, <i>Scientific Name</i>	Presence in St. Croix National Scenic Riverway (Namekagon River near Cable, WI)	Listing Status	Section 7 Effect Determination*
Northern long-eared bat, <i>Myotis septentrionalis</i>	Confirmed	Threatened	MA/NLAA
Canada lynx, <i>Lynx canadensis</i>	Anecdotal	Endangered	NE
Gray wolf, <i>Canis lupus</i>	Confirmed	Threatened	NE
Fassett's locoweed, <i>Oxytropis campestris var. chartacea</i>	Not present	Threatened	NE

*MA/NLAA = May Affect, Not Likely to Adversely Affect; NE = No Effect

3.3 VISITOR USE AND EXPERIENCE

3.3.1 Affected Environment

The upper Namekagon River is characterized by quiet stretches of river as well as hairpin turns and towering trees. Visitor uses in the area include biking and hiking, nature viewing, birdwatching, paddling, fishing, photography, and primitive camping.

The trail network to the south and east of the river in the project area (see Figure 1) currently contains about 85 miles of mountain biking, hiking, cross-country ski, and snowmobile trails on town, county, US Forest Service, and private lands in the Cable, Namekagon, and Seeley areas (CAMBA 2020), and new regional trails and trailheads are in the planning phases. The predominant vegetation type in the area is upland mixed hardwood and conifer forest, including deciduous trees with an understory of forbs and sedges.

Existing hiking and biking trails in the Cable area traverse a variety of easy to difficult terrain, with numerous interconnections so that loops of varying length can be traveled. In the several miles of other trails near to the proposed connector trail, there are few connections to the Namekagon River itself; the existing bridge over the river on the abandoned railroad bed is maintained by Bayfield County and currently receives pedestrian and bike use. The proposed trail would be constructed in mixed hardwood and conifer forest and would require similar construction and maintenance techniques as CAMBA has used in other local trail-building projects.

3.3.3 Impacts of Alternative 1: No-Action

Under the no-action alternative, the proposed action would not be undertaken. While there would be no adverse impacts on visitors because of trail construction or maintenance, visitors would not have the opportunity to use an additional trail segment that would be an important and convenient connector.

3.3.4 Impacts of Alternative 2: Proposed Action

The proposed action would add 0.25 mile of trail to the Riverway trail network. This impact would be small but beneficial in the context of extensive multi-use trails in the vicinity of Cable. Owing to its location and the connection it would provide, this short trail segment would provide an important link that has been identified by the National Park Service and local stakeholders. The proposed trail would re-establish a hiking and mountain biking connection in an area that previously had public use, in keeping with the Riverway's resources and values to provide recreational opportunities on and along the Namekagon River (NPS 2017). Pending compliance with the NPS Bicycle Rule on the proposed trail segment, the proposed action would also provide for a new type of visitor opportunity in the park, albeit on a relatively small segment.

The trail would provide a connection between the abandoned Chicago Northwestern railroad grade on the west end of the trail, and an old logging road. The proposed trail would be designed as a safe, sustainable route that would be maintained by local community non-profit organizations for the recreational and health benefits of local residents and visitors. The proposed trail would also provide a shorter connection for visitors to cross the Namekagon River and have opportunities to view the river, wildlife, and scenery along the river. Based on other use in the Riverway and nearby trail networks, it is likely that the proposed trail would be used in all four seasons by pedestrians and bicyclists.

Park visitors who are using the Namekagon River for paddling, fishing, and nature viewing or similar activities are likely to occasionally hear and see visitors who are using the proposed trail if they cross the abandoned railroad bridge (approximately one-tenth of a mile northeast of the west end of the proposed trail; see Figure 1). This interaction could be viewed as positive or negative depending on the individual user, but in either case, it is within the range of expectations and ongoing visitor use and experience at the Riverway. Similarly, more visitors may traverse Parker Road (approximately two-tenths of a mile northeast of the east end of the proposed trail; see Figure 1) if the proposed trail is built, creating a small increase in visitor interactions.

Occasionally, the park issues a special use permit for a footrace on the trails in the area. The proposed trail may be used for occasional community walks, footraces, and bike races in the future. Occasional maintenance activities, such as regrading of eroded areas or removal of hazard trees, may disrupt visitor use on the proposed trail. These would be signed and noticed similar to all such activities at the Riverway.

Trail maintenance would likely constitute an intermittent adverse impact but overall would result in beneficial impacts to visitor use and experience on the proposed trail by ensuring a safe, well-maintained trail.

Overall, the addition of a new connector trail and trail use opportunities (bicycling) would have beneficial impacts to visitor use and experience under the proposed action because it would provide connectivity to other trails in the area and result in additional opportunities for recreation.

Construction, use, and maintenance of the trail could result in minimal adverse impacts on individual users' experience, such as those who prefer to use trails only for hiking.

CHAPTER 4: CONSULTATION AND COORDINATION

4.1 INTRODUCTION

The NPS places a high priority on public involvement in the planning process and on giving the public an opportunity to comment on the proposed action. Consultation and coordination with federal, state, and local agencies, as well as American Indian tribes, were also conducted to identify issues and concerns related to natural and cultural resources within the park. This chapter provides a summary of the public and stakeholder involvement and agency and tribal consultation that occurred in the preparation of this environmental assessment.

4.2 PUBLIC INVOLVEMENT

This Environmental Assessment will be available for public review during a 30-day comment period in fall 2020. Comments from the public will be addressed and summarized in the decision documentation for this proposed federal action.

4.3 CONSULTATION AND COORDINATION WITH OTHER AGENCIES, OFFICES, AND TRIBES

4.3.1 Federal Agencies and Organizations

U.S. Fish and Wildlife Service

4.3.2 Federally Recognized American Indian Tribes Invited to Consult on this Undertaking

Bad River Band of Lake Superior Chippewa
Bay Mills Indian Community of Michigan
Crow Creek Sioux Tribe
Fond du Lac Band of Lake Superior Chippewa
Grand Portage Band of Lake Superior Chippewa
Ho-Chunk Nation of Wisconsin
Keweenaw Bay Indian Community
Lac Courte Oreilles Band of Lake Superior Chippewa
Lac du Flambeau Band of Lake Superior Chippewa
Lac Vieux Desert Band of Lake Superior Chippewa
Lower Sioux Indian Community
Mille Lacs Band of Ojibwe
Prairie Island Indian Community
Red Cliff Band of Lake Superior Chippewa
Shakopee Mdewakanton Sioux Community
Sokaogon Chippewa Community of Wisconsin
St. Croix Chippewa Indians of Wisconsin
Upper Sioux Community of Minnesota

On June 5, 2020, the NPS contacted 18 federally recognized American Indian Tribes listed above, sharing information about the proposed undertaking and inviting them to consult on the project. Follow-up phone calls were placed to Tribes in June and July 2020. Of the 18 Tribal partners contacted, no Tribes expressed interest in consulting on the proposed undertaking.

4.3.3 State Agencies and Organizations

Wisconsin Department of Natural Resources
Wisconsin State Historical Preservation Office

4.3.4 Other Agencies, Organizations, and Entities

Chequamegon Area Mountain Bike Association

CHAPTER 5: PREPARERS, PARTNERS, AND CONSULTANTS

The following individuals and groups contributed to the development, review, and supporting information and analyses for this planning effort and EA:

5.1 ST. CROIX NATIONAL SCENIC RIVERWAY INTERDISCIPLINARY TEAM

Juliet Galonska, Superintendent
Mark Denker, Chief of Facilities and Maintenance
Laura Hojem, Lands Program Manager
Byron Karns, Natural Resource Program Manager
Jonathan Moore, Cultural Resources Program Manager
Michael Rhoades, Biological Science Technician
Christopher Romportl, Maintenance Worker Supervisor
Nicholas Shope, Chief Ranger
Lisa Yager, Chief of Resource Stewardship and Education and IDT Lead
Sarah Waterworth, Chief of Administration

5.2 NPS MIDWEST REGIONAL OFFICE (DOI REGIONS 3/4/5)

Tokey Boswell, Chief, former Planning & Compliance Division
Christine Gabriel, Regional Environmental Coordinator & NEPA Lead
James Lange, former Planning Portfolio Manager

5.3 OTHER PARTNERS AND CONSULTANTS

Chequamegon Area Mountain Bike Association
Larissa Read, Common Ground Consulting, LLC
St. Croix River Association

CHAPTER 6: REFERENCES

Chequamegon Area Mountain Bike Association (CAMBA)

2020 Cable and Seeley Cluster Mountain Bike Trails map. <https://www.cambatrails.org/>

International Mountain Biking Association (IMBA)

2017 Trail Solutions. <https://www.imba.com/resource/trail-solutions>

National Park Service (NPS)

1988 St. Croix National Scenic Riverway General Management Plan.

2006 NPS Management Policies 2006.

2011 Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision-Making.

2012. Great Lakes Integrated Pest management Plan / Environmental Assessment. NPS Great Lakes Parks. <https://parkplanning.nps.gov/projectHome.cfm?projectID=34281>

2014. Great Lakes Network Resource Brief, "Monitoring Vegetation Along the St. Croix Riverway". NPS Inventory and Monitoring Network. <https://irma.nps.gov/Datastore/DownloadFile/546662>

2015 National Park Service NEPA Handbook. https://www.nps.gov/subjects/nepa/upload/NPS_NEPAHandbook_Final_508.pdf.

2017 St. Croix National Scenic Riverway Foundation Document.

2020 Trip Report, Cable Trail Section 106 Inventory, St. Croix National Scenic Riverway, July 16-17, 2020; on file at park.

Sanders, S. and J. Kirschbaum

2014 Forest health monitoring on the St. Croix National Scenic Riverway: Short-term change and longer-term projections. *The Journal of the Torrey Botanical Society*, 142(4):271-282.

U.S. Fish and Wildlife Service (USFWS)

2020a IPaC Resource List for Bayfield County, WI. Accessed 4/9/2020 at <https://ecos.fws.gov/ipac/>

2020b Species Profile: Northern Long-Eared Bat (*Myotis septentrionalis*). Accessed 4/22/2020 at <https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=A0JE>

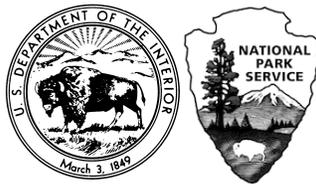
Wisconsin Department of Natural Resources (Wisconsin DNR)

2016 Broad Incidental Take Permit/Authorization for Common Activities - Wood Turtle (*Glyptemys insculpta*).

2017 Northern Long Eared Bat (*Myotis septentrionalis*) Species Guidance. PUB ER-700.

Wisconsin Natural Heritage Inventory (Wisconsin NHI)

2020 Species data for Township 43N, Range 08W. Accessed 4/30/2020 at <https://dnr.wi.gov/topic/nhi/>



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 historical 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 US administration.

NPS SACN 630 / 173697

September 2020

US Department of the Interior – National Park Service