

National Park Service
U.S. Department of the Interior

St. Croix National Scenic Riverway
Minnesota / Wisconsin



Fairy Falls Day Use Area Environmental Assessment

JUNE 2024



Executive Summary

St. Croix National Scenic Riverway (SACN or “the Riverway”) has prepared an Environmental Assessment (EA) to evaluate improvements and enhancements to an approximately 1-mile natural surface loop trail in the Fairy Falls Day Use Area and to develop a parking lot to provide safe, off-street parking for visitors. The trail system would be open for hiking, nature viewing, trail running, and snowshoeing. No bicycle use would be permitted, and the day use area would continue to be open from dawn to dusk with no overnight use.

This EA has been prepared in compliance with the National Environmental Policy Act (NEPA) to provide a decision-making framework as follows: 1) Assess a reasonable range of alternatives to meet the purpose of the proposed action; 2) Evaluate potential issues and impacts to the natural and cultural resources of the SACN; and 3) Identify required mitigation measures designed to lessen the degree or extent of any potential adverse environmental impacts.

The purpose of taking action is to maintain safe access to Fairy Falls waterfall and the day use area, while retaining its natural character and providing a range of visitor opportunities. The need for action is to improve visitor access; provide a safe, clearly marked trail system; enhance NPS presence and identity at the day use area; and remediate a lack of parking for visitors.

Two alternatives have been evaluated: an Action Alternative (the preferred 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 (NPS) would maintain the current conditions at the site. Under the proposed action, an approximately 1-mile natural surface loop trail system would be established at Fairy Falls Day Use Area, maintaining access to the top of Fairy Falls and providing recreational opportunities into the interior of the 54-acre property. A future parking lot that could accommodate up to a dozen vehicles is also included in the proposed action. The proposed parking lot would be developed on NPS property adjacent to and west of Highway 95 and north of Fairy Falls Road and Silver Creek. The alternatives are described in detail in Chapter 2.

This EA identifies the categories of resources, or Impact Topics, found within the project area that are most likely to be affected by the actions described within the alternatives. These topics have undergone a detailed analysis by agency staff to determine the most likely effects on the resources and the required mitigations to avoid resource damage. The Impact Topics are identified in Section 1.5 of this document, and in Table 1. The preferred action would not result in significant impacts to any resources within SACN.

Public Comment

This EA will be available for public comment for 30 days, from 06/17/2024 to 07/16/2024, through the NPS Planning, Environment and Public Comment (PEPC) website which provides access to current plans and related documents and is located here: <https://parkplanning.nps.gov/fairyfalls> or you may mail written comments by 07/16/2024 to the address listed below.

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

Before including your address, phone number, email address, or other 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.

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CHAPTER 1: PURPOSE AND NEED FOR ACTION

1.0 Introduction

The National Park Service (NPS) is proposing action to maintain safe access to Fairy Falls waterfall and the associated day use area at St. Croix National Scenic Riverway, while retaining its natural character and providing a range of visitor opportunities. St. Croix National Scenic Riverway (often abbreviated “the Riverway”, “the park, or “SACN” in this document) is located in northwest Wisconsin and eastern Minnesota. It is a component of the National Wild and Scenic Rivers System and unit of the National Park System administered by the NPS.

The purpose of the SACN 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. 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. The NPS has managed the property now known as the Fairy Falls Day Use Area since 1980. Visitor use has increased across the Riverway including at the day use area in the past decade.

1.1 Purpose and Need

The purpose of the action is to maintain safe access to Fairy Falls waterfall and the day use area (see Figure 1), while retaining its natural and cultural character and providing a range of visitor opportunities. The need for action is to improve visitor access, provide a safe, clearly marked trail system, enhance NPS presence and identity at the day use area, revegetate undesignated trails, and remediate a lack of parking for visitors. The NPS proposed action is to improve and enhance an approximately 1-mile natural surface trail system in the Fairy Falls Day Use Area and develop a parking lot on NPS property, adjacent to and west of Highway 95 and north of Fairy Falls Road and Silver Creek, to provide safe, off-street parking for visitors. The trail system would be open for hiking, trail running, and snowshoeing. No bicycle use would be permitted, and the day use area would continue to be open from dawn to dusk, with no overnight use.

The planning team developed the following vision statement for Fairy Falls Day Use Area, based on public and staff input: *Fairy Falls Day Use Area is open to the public. The site retains its natural character and cultural resources while providing visitors with opportunities to safely view the waterfall. The NPS focuses on managing natural resources, sharing connections to the history of the site, and providing safe access for visitors.*

1.2 Project Objectives

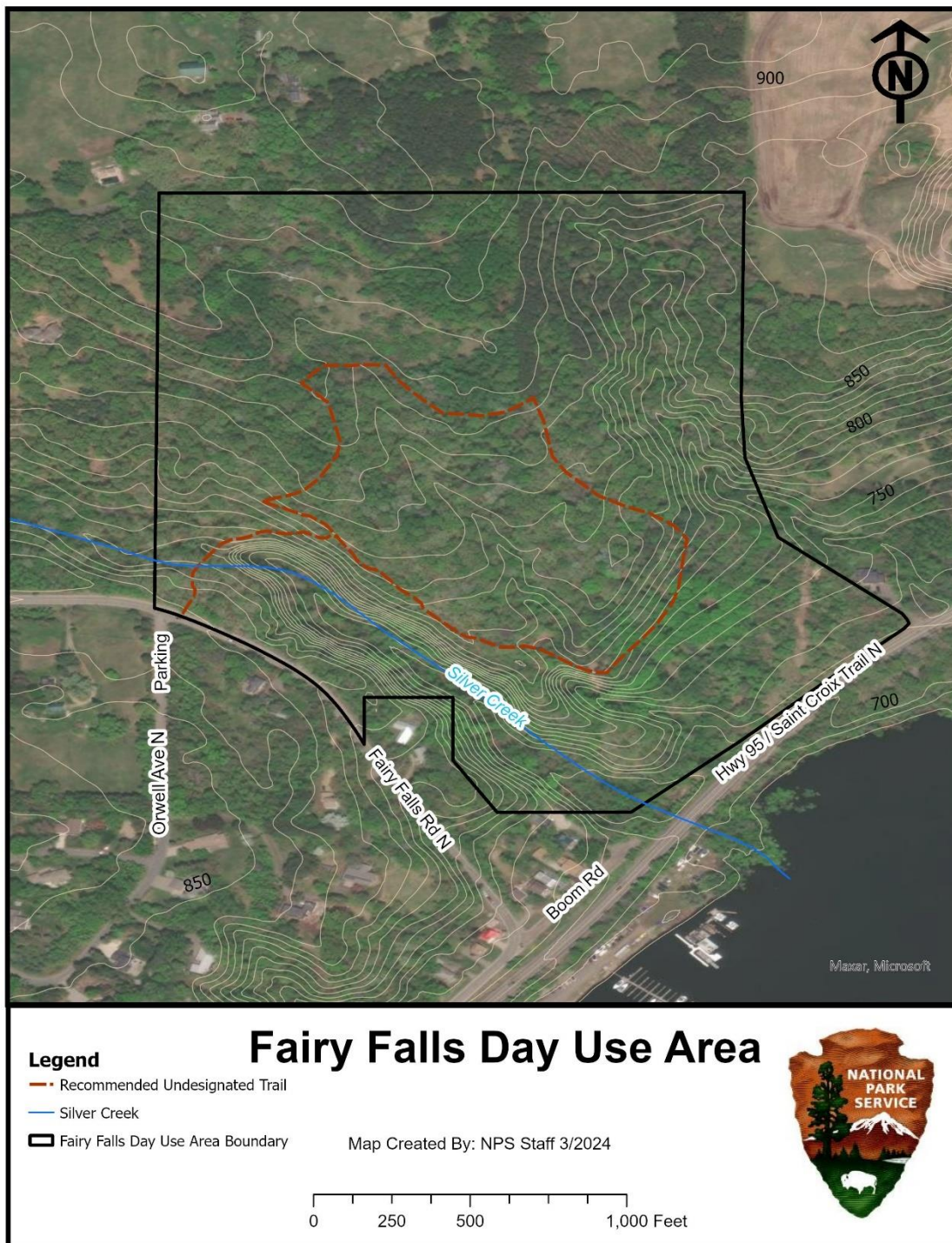
Objectives are more specific statements of purpose that provide additional basis for comparing the effectiveness of alternatives in achieving the desired outcomes of the action (NPS 2015). The following objectives were identified by the planning team for this project:

- Expand and enhance the trail system at Fairy Falls Day Use Area to improve visitor experience and safety while protecting natural and cultural resources
- Accommodate different types of trail use, including hiking and passive recreational uses such as photography, while reducing maintenance by using sustainable trail management and construction techniques and minimizing park infrastructure
- In the future, develop a parking lot for approximately twelve vehicles on NPS property adjacent to and west of Highway 95 and north of Fairy Falls Road and

Silver Creek to improve visitor safety, and reduce on-street and neighborhood parking

- Accommodate possible future trail connections and management partnerships with state, county, municipal, and other partners

Figure 1: Existing Conditions at Fairy Falls Day Use Area



1.3 Project Background

This Environmental Assessment (EA) details the effort of the NPS to plan for improved safety and visitor opportunities at Fairy Falls Day Use Area into the future. Fairy Falls Day Use Area was closed to the public starting in spring 2020 due to lack of safe visitor access and deteriorating undesignated trails (which are unmarked, unofficial, and unmaintained) along steep slopes.

Starting in fall 2021, SACN explored opportunities for improving safety, protecting the natural environment, and enhancing visitor experiences at Fairy Falls Day Use Area. Riverway staff invited public comments to gather input and ideas for the future of Fairy Falls Day Use Area. Riverway staff also met with local and regional partners for their input in summer 2022, prior to the reopening of the site. In December 2022, the site was reopened for visitor use after primary safety concerns were addressed. In February 2023, site options were shared with the public for their input, and in June 2024, the NPS preferred alternative was shared with the public for their feedback.

In 2021, the NPS also initiated consultation with nineteen federally recognized American Indian Tribes regarding the agency's intent to explore future management approaches for Fairy Falls Day Use Area. Five Tribes expressed interest in consulting on this undertaking. The NPS summarized the initial feedback received from Tribal partners into four key themes about Fairy Falls and its environs that would inform site management: This Site is a Home, A Light Hand, Intactness, and Keeping it Whole. The NPS intends to continue to consult with Tribal partners as project-specific plans become further refined. See Section 3.8 Cultural Resources and Chapter 5: Consultation and Coordination for more information.

This plan fulfills park planning priorities for resource preservation and visitor use and serves as a component of the park's planning portfolio. The park's planning portfolio is the collection of planning documents that guide decision making and satisfies law and policy. The planning portfolio enables the use of targeted planning documents (such as this one) to meet the four general management plan statutory requirements identified in 54 USC 100502 and a broad range of park planning needs.

In addition to the proposed action detailed in this EA, the NPS would remain open to discussions about land exchanges, partnerships, and future acquisition of additional property from willing sellers that would enhance safety, access, and visitor enjoyment of Fairy Falls Day Use Area while protecting the site's natural and cultural resources. The NPS would also remain open to discussions about future alternative transit options, such as shuttles and bicycle parking, as regional trail planning continues and as other options for parking or access may emerge.

1.4 Project Area

Fairy Falls Day Use Area is a 54-acre natural area near Stillwater, Minnesota, that has been owned by the NPS since 1980. Deep ravines and steep bluffs surround Silver Creek as it passes through a marsh on its way to the St. Croix River. The 50-foot-tall waterfall and surrounding landscape are exemplary in a regional context and represent outstandingly remarkable values (ORV) of the Riverway. The area has a long history of human use and visitation, and its ecological diversity provides habitat for a variety of plants and animals. Fairy Falls Day Use Area is located in the rural residential zone of St. Croix National Scenic Riverway (NPS 2002).

1.5 Issues and Impact Topics

Impact topics are the resources or issues of concern that could be impacted by the range of alternatives. NPS specialists used federal laws, regulations, and management policies to

identify the impact topics retained for further analysis. Identification of impact topics facilitates the analysis of environmental consequences and allows for a standard comparison between alternatives based on the most relevant information. Table 1 summarizes the topics retained or dismissed and includes the rationale for dismissal.

The five impact topics below 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:

- Soils,
- Vegetation,
- Species of Special Concern,
- Cultural Resources, and
- Visitor Use and Experience.

Issues related to air quality, human health and safety, wildlife and other topics have been dismissed from detailed analysis because they are not central to the proposal or do not assist with making a reasoned choice between alternatives. Table 1 summarizes the topics retained or dismissed and includes the rationale for dismissal.

Table 1. Impact Topics Retained or Dismissed

Impact Topic	Retain	Dismiss	Rationale for Dismissal
Air Quality		X	Air quality impacts are expected to be negligible. Dust and airborne soil may affect localized air quality during the parking lot construction period, limited to less than 100 feet around the parking lot construction zone. Small equipment such as mini-excavators, skid steers, or small bulldozers may be used during construction or for limited trail repairs and realignment, 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. Therefore, this topic was dismissed from further analysis in this EA.
Cultural Resources	X		Tribal partners have expressed important cultural connections between Tribal people and this place over a long period of time. The archeological record affirms a long history of people using and being in relationship with the site. Some of the most visible cultural resources at Fairy Falls Day Use Area today include features associated with 20 th Century agricultural use of the site, including an apple orchard, a pine plantation, a planted sugar bush, and a cold storage cave. This topic was retained for further analysis in Chapter 3.
Environmental Justice		X	Federal agencies are required to identify and address any disproportionately high and adverse human health and environmental effects their actions may have on minority and low-income populations. Neither alternative would have disproportionate effects on minority or low-income populations. Therefore, this topic was dismissed from further analysis in this EA.
Human Health and Safety		X	The proposed action is unlikely to have impacts on human health and safety in the park or nearby communities. Impacts to safety are expected to be negligible, except that improved lighting, signage, a parking lot for safe access, and trail maintenance may provide safer choices for visitor use. Therefore, this topic was dismissed from further analysis in this EA.
Indian Trust Resources		X	The NPS has consulted with Tribal Nations to ensure Tribal perspectives and interests are considered and honored within the plan and to protect the cultural significance of the site to Tribes. While ten Ojibwe Tribes have reserved Treaty rights within the Riverway, the ceded territory associated with the White Pine Treaty lies north of Marine on St. Croix, Minnesota and does not extend as far south as Fairy Falls. As part of the planning process, the NPS is required to address whether there are specifically “American Indian Trust Resources” within the project area. No lands held in trust for the benefit of Indians are located in the vicinity of the project area. Similarly, the lands comprising the day use area are not held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians. For these reasons, the topic of “American Indian Trust Resources” was not retained for further analysis. The NPS will continue to consult with Tribal Nations to ensure the plan and stewardship of the site reflects Tribal perspectives and interests. Therefore, this topic was dismissed from further analysis in this EA.
Land Use		X	The proposed action is unlikely to have impacts on land use. Therefore, this topic was dismissed from further analysis in this EA.
Socioeconomics		X	The proposed action is unlikely to have socioeconomic impacts on the park or nearby communities. 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. Therefore, this topic was dismissed from further analysis in this EA.
Soils	X		Impacts to soils are anticipated to be minimal and limited to the parking lot construction zone and discrete areas of the loop trail requiring maintenance or improvement. Removal and revegetation of undesignated trails may have long-term benefits in some locations. Geologic resources, such as naturally occurring caves, karst, unique geologic formations, and mining and

Impact Topic	Retain	Dismiss	Rationale for Dismissal
			extractive resources are not present in the project development area. This topic was retained for further analysis in Chapter 3.
Soundscape and Visual Resources		X	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 parking lot construction or trail work may occur. Long-term acoustic impacts are expected to be negligible and consistent with ongoing uses in the area. With the proposed addition of parking near the day use area, there may be an increase in human-created sound. Noise caused by human activity on the trail system would not change appreciably because of the proposed action. Views in the project area would change to a small degree with development and maintenance of a new loop trail and with the construction of the parking lot but would be consistent with other existing development in the immediate vicinity and throughout the park and community. The view from the St. Croix River would not be impacted by the proposed action. Therefore, this topic was dismissed from further analysis in this EA.
Special Status Species	X		Three federally listed species may be impacted by the proposed action: northern long-eared bat (<i>Myotis septentrionalis</i> , endangered), tricolor bat (<i>Perimyotis subflavus</i> , proposed endangered), and rusty patched bumble bee (<i>Bombus affinis</i> , endangered). Two Minnesota state listed species may be impacted by the proposed action: fernleaf false foxglove (<i>Aureolaria pedicularia</i> , state threatened) and kitten-tails (<i>Synthyris bullii</i> , state threatened). Development and maintenance of the loop trail and construction of a parking lot may include removal of trees and other vegetation, which may impact these species of special concern. This topic was retained for further analysis in Chapter 3.
Vegetation (Non-Special Status Species)	X		The predominant vegetation type in the project area is upland mixed hardwood and conifer forest, with previously managed areas that include old orchards, a planted sugar bush, and an unmanaged pine plantation. Some individual plants and trees would be disturbed and/or removed during maintenance of the loop trail and parking lot construction. This topic was retained for further analysis in Chapter 3.
Visitor Use and Experience	X		The proposed action would improve approximately 1 mile of trails in the Riverway, provide several new visitor amenities, and provide safety improvements, altering existing recreation uses and opportunities. Additionally, the possible future construction of a parking lot on NPS property would alter existing transportation and recreation uses and opportunities. This topic was retained for further analysis in Chapter 3.
Water Resources		X	Neither water quality nor water quantity would be affected by the proposed action, due to the location of the loop trail and the proposed parking lot. Use of the proposed loop trail system would have negligible impacts on the St. Croix River, wetlands, or floodplains because these areas would be avoided in the proposed action. 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, nor would exceptions from NPS Director's Order 77-1: Wetlands and 77-2: Floodplains. Therefore, this topic was dismissed from further analysis in this EA.
Wild and Scenic Rivers		X	The improved trail and new parking lot would not require a WSRA Section 7(a) Determination because the trail is not located below the ordinary high-water mark of the St. Croix 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. Therefore, this topic was

Impact Topic	Retain	Dismiss	Rationale for Dismissal
			dismissed from further analysis in this EA.
Wildlife (Non-Special Status Species)		X	The day use 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. Therefore, wildlife and wildlife habitat have been dismissed from detailed analysis, but project specific BMPs and PDC (see Table 3) will minimize impacts to wildlife and wildlife habitat. Therefore, this topic was dismissed from further analysis in this EA.

CHAPTER 2: ALTERNATIVES

2.0 Introduction

This section describes the alternatives developed. Two alternatives to management of the Fairy Falls Day Use Area are discussed: the no action alternative (Alternative A) and the action alternative (Alternative B, the preferred). A no action alternative is required by the NEPA as a baseline to compare other action alternatives. The action alternative presents a reasonable and feasible approach that meets the purpose of and need for action and describes the NPS preferred alternative. This section also identifies mitigation measures for the action alternative. Impacts associated with the actions proposed under each alternative are outlined in Chapter 3: Affected Environment and Environmental Consequences of this EA.

2.1 Alternative A: No Action Alternative

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 the Fairy Falls Day Use Area under existing conditions. Occasional management actions would occur to mitigate erosion, address human safety concerns, and remove hazard trees. Law enforcement would continue to regularly patrol the area. Parking would continue to be managed through partnerships with state, county, and municipal agencies. All current rules and regulations for the area would continue.

This alternative would continue current management and visitor opportunities at Fairy Falls Day Use Area. Fairy Falls Day Use Area currently contains about 2 miles of unmaintained and undesignated trails. Visitors would be able to explore the site on existing undesignated trails. Visits to the waterfall would likely remain a priority for many visitors, while most undesignated trails would remain open for visitor use. The undesignated trails are unmarked, unofficial, and unmaintained.

NPS staff would maintain one wooden bridge that crosses Silver Creek. Permanent carsonite posts marking the park boundary would remain in several locations. NPS staff would maintain one entrance sign near the intersection of Orwell Avenue and Fairy Falls Road. Maintenance staff would not visit the site on a regular basis but would maintain facilities if needed due to resource degradation (e.g., erosion) or vandalism. There is an active volunteer program that visits the site to remove trash and convey messages to NPS staff about site conditions, and this would continue under the no action alternative.

Current relationships and dialogue with Tribal partners would continue.

Limited trail improvements would occur, primarily for safety and resource protection. Hazard tree monitoring and removal would continue, per the park's Hazard Tree Management Plan. NPS staff may improve maps and signage. Targeted invasive species management would continue via both mechanical and chemical means, per the Great Lakes Invasive Species Management Plan (NPS 2012). Operation of the water quality gaging station would continue, in partnership with Carnelian Marine St. Croix Watershed District. Rare species monitoring and reporting would continue as time and funding allow.

Automobile parking would remain limited to approximately six spaces along Orwell Avenue via a partnership with Stillwater Township. No changes in parking availability would be implemented.

Communication and coordination with Washington County, City of Stillwater, Stillwater Township, Washington Conservation District, and other federal, state, regional and local partners would continue.

Active law enforcement patrols would continue. Related law enforcement actions, such as graffiti removal and issuance of warnings and tickets, would continue. Partnerships would continue with other local law enforcement, fire districts, and emergency medical services.

No interpretation or educational activities or programming would occur.

See Table 2 for more details about NPS management activities that would occur under either the no action alternative or the proposed action.

2.2 Alternative B: Action Alternative (proposed action and preferred alternative)

Visitor use would take place at Fairy Falls Day Use Area and be dispersed site-wide with a natural-surface loop trail. This alternative would include minimal development and would maintain a rustic and natural feel in Fairy Falls Day Use Area. Amenities would be designed to offer a variety of opportunities to visitors with different skill levels and abilities.

The primary recreational opportunity would be a loop trail of approximately 1 mile that would provide hiking to view the waterfall and through other parts of the site. The proposed trail in Alternative B: Proposed Action closely aligns with the Fairy Falls Treatment Alternative A in the 2019 Cultural Landscape Assessment (NPS 2018). Figure 2 depicts the proposed trail corridor inside of which the loop trail may be developed.

The focus of NPS management and facilities would be maintenance of a natural loop trail system and safe viewing of the waterfall. The primary designated trail loop would guide visitors from Orwell Avenue via Stillwater Township to the top of the waterfall for nature viewing, photography, and walking opportunities. Access to the bottom of the waterfall would not be encouraged, for the sake of safety and resource protection. Facilities maintenance and management operations would be distributed across Fairy Falls Day Use Area, with primary emphasis on providing a loop trail system.

Visitors should expect to encounter multiple groups of visitors when visiting the day use area at the waterfall and along the loop trail. Occasional trail or area closures may be expected for safety or resource protection. Visitor data collection and monitoring would continue to better understand visitor use patterns and also inform other future actions related to visitor use levels and access.

Under this action alternative, parking would remain limited to approximately six spots along Orwell Avenue via a partnership with Stillwater Township for the foreseeable future. Once funding is obtained and, site-specific design, compliance and permitting are fully considered and complete, a parking lot of approximately 1.25 acres may be developed to accommodate approximately 10-12 vehicles for daytime use at Fairy Falls Day Use Area. The proposed parking lot would be developed on NPS property adjacent to and west of Highway 95 and north of Fairy Falls Road and Silver Creek. Amenities such as lighting, a vault toilet, additional maps and visitor information kiosks, bicycle parking, and trash and recycling receptacles may be added to the parking location. The parking lot would also provide a location for emergency access and parking for administrative use and law enforcement. A trail would connect the parking lot to the longer loop trail within the Day Use Area. This connector trail would only be developed when a parking lot is developed.

A new sign may be installed near the waterfall to remind visitors of safety precautions advisable near the waterfall. Signage may include both directional guidance and site information. NPS staff would maintain one wooden bridge that crosses Silver Creek. Permanent carsonite posts marking the park boundary would remain in several locations. For the foreseeable future, NPS staff would

maintain one entrance sign near the intersection of Orwell Avenue and Fairy Falls Road, although a second entrance sign may be installed in the future to improve wayfinding to a parking lot on NPS property.

Current relationships and dialogue with Tribal partners would continue. Tribal partners have provided information that the NPS has summarized into four key themes that would inform management decisions:

This Site is a Home, A Light Hand, Intactness, and Keeping it Whole.

The NPS would carry out limited trail improvements under the proposed action, primarily for safety and resource protection. Some parts of the proposed trail would remain along current undesignated trail alignments but would be improved for safety and resource protection. Other sections of the proposed trail would require new trail development. Closure and revegetation projects on undesignated social trails would continue. Ongoing hazard tree monitoring and removal would continue, per the park's Hazard Tree Management Plan. NPS staff may improve maps and signage as Geographic Information System data are updated or as other needs arise. Slope stabilization projects would be implemented to reduce erosion and improve safety, especially near and above the waterfall itself.

Targeted invasive species management would continue via both mechanical and chemical means, per the Great Lakes Invasive Species Management Plan (NPS 2012). A native species restoration plan and invasive plant management would be developed and implemented based on desired future conditions. Raised boardwalks may be constructed in several locations along the loop trail for visitor safety and species/habitat protection.

Partnerships with the Carnelian Marine St. Croix Watershed District would be maintained, and priority recommendations for Silver Creek and Fairy Falls could be implemented (CMSCWD 2004; CMSCWD 2014). Operation of the water quality gaging station would continue, in partnership with Washington Conservation District. Rare species monitoring and reporting would continue as funding allowed.

Communication and coordination with Washington County, City of Stillwater, Stillwater Township, Washington Conservation District, and other regional and local partners would continue. The NPS would continue to engage with state partners such as the Department of Natural Resources and the Department of Transportation.

The NPS would continue and grow partnerships for volunteer programs, grants, education, technical assistance, forestry program, and facilities development. Volunteer projects with community groups would be expanded, such as to improve visitor amenities, enhance resource protection such as invasive species management, and assist with maintenance of the loop trail.

Active patrols and heightened NPS presence would occur under the proposed action. Law enforcement and related management activities such as graffiti removal and issuance of warnings and tickets would continue. Partnerships would continue with other local law enforcement, fire districts, and emergency medical services. Coordination of NPS law enforcement with other jurisdictions may be expanded. Property boundary signage and restrictions would be improved and clarified, especially at the primary access point and potential parking lot. Enforcement for littering and defacing NPS property would be enhanced through more regular NPS patrols. Coordination with other law enforcement, fire districts, and emergency medical services would be expanded.

Interpretation of cultural resources such as the cold cave storage, the pine plantation, the orchard, and the sugarbush may be developed. Additionally, interpretation of the area's history and cultural importance to Tribal partners may be developed in coordination with Tribes. Interpretive materials about connection of Fairy Falls and Silver Creek to the larger watershed and the St. Croix

National Scenic Riverway would be explored, including content and the placement of any signs or panels.

See Table 2 for more details about NPS management activities that would occur under either the no action alternative or the proposed action.

Figure 2: Map of Alternative B

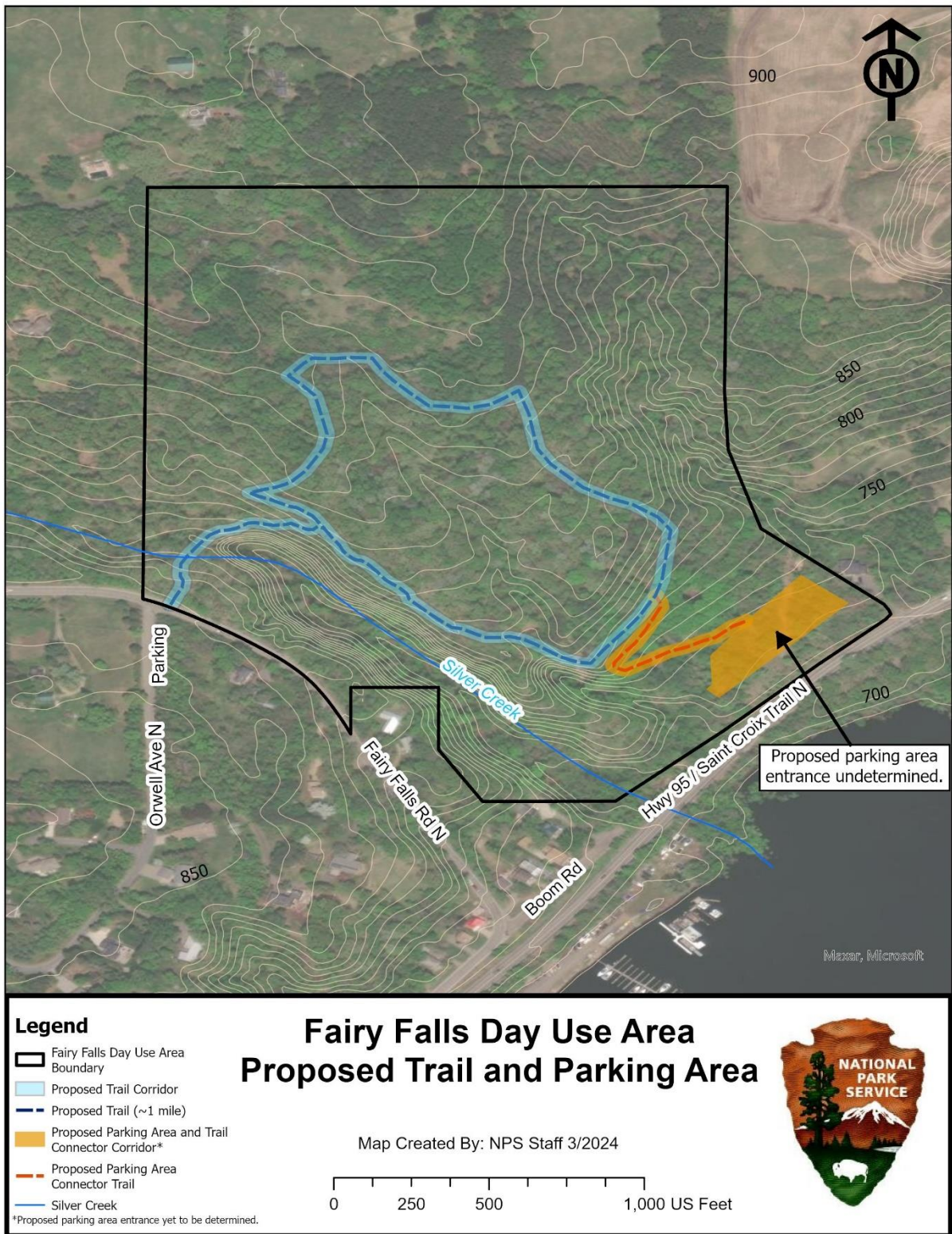


Table 2. NPS Management Activities Common to Both Alternatives A and B

The following NPS management activities would occur under either the no action alternative or the proposed action:

- Maintain a rustic and natural feel in Fairy Falls Day Use Area
- Continue partnerships to provide parking and safe access
- Evaluate existing and identify additional parking options
- Allow use in Fairy Falls Day Use Area for daytime use only, from sunrise to sunset
- Prohibit overnight use, camping, bicycle use, and fires
- Provide improved maps and signs including safety and orientation information
- Provide opportunities for visitors with a range of skill levels and abilities
- Protect natural and cultural resources, such as invasive plant species management
- Continue engagement with Tribal partners to ensure site stewardship honors the cultural significance of the site to the Tribes
- Carry out occasional management or closures due to unsafe conditions or highly eroded trails
- Continue law enforcement patrols and maintenance activities to support a safe, clean day use area
- Continue to allow deer archery hunting in Fairy Falls Day Use Area in accordance with state and federal laws
- Continue to allow dogs, if they are on a leash no longer than six feet in length, and their excrement must be disposed of properly

2.3 Alternatives Considered but Dismissed

Early in the planning process, staff and members of the public considered a site option in which a loop trail would extend to the lower areas of Fairy Falls. This option was not carried forward for several reasons. The wetland habitat below Fairy Falls supports special status species that could be harmed by normal visitor use patterns. Additionally, a safe connection between the top of the waterfall and the valley below would require a substantial amount of trail construction, potentially including hardening or armoring, which would not be in keeping with maintaining a rustic feel at Fairy Falls Day Use Area. This concept was dismissed from further evaluation in this EA.

CHAPTER 3: AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.0 Introduction

This chapter describes the affected environment, documents existing conditions, and analyzes environmental consequences or “impacts” of the no action alternative and action alternatives for each resource. The resource topics presented in this section correspond to the environmental issues and concerns identified during internal scoping.

In accordance with the Council on Environmental Quality (CEQ) regulations, the environmental consequences analysis includes the direct, indirect, and cumulative impacts (40 CFR 1502.16) of each alternative. The intensity of the impacts is assessed in the context of the park’s purpose and significance and any resource-specific context that may be applicable (40 CFR 1508.27). The methods used to assess impacts vary depending on the resource considered, but generally are based on a review of pertinent literature and studies, information provided by on-site experts and other agencies, dialogue with Tribal partners, professional judgment, and NPS staff knowledge and insight.

3.1 Affected Environment

The affected environment describes existing conditions for those elements of the natural and cultural environment (including human health and safety and the visitor experience) which could be affected by the actions proposed in the alternatives. These descriptions serve as a baseline for understanding the resources that could be impacted by implementation of the proposed action.

3.2 Impacts

According to the 2022 Council on Environmental Quality (CEQ) revised regulations, “effects or impacts” are changes to the human environment that include reasonably foreseeable (1) direct effects, (2) indirect effects, and (3) cumulative effects [40 CFR §1508.1(g)].

Agencies consider the potentially affected environment and degree of effects to determine the significance of an action’s impacts. The degree of effects is assessed in the context of the Park’s purpose and significance and any resource-specific context that may be applicable. When assessing the degree of effects, agencies consider:

- Both short (during construction and rehabilitation)- and long-term (post construction & rehabilitation) effects.
- Both beneficial and adverse effects.
- Effects on public health and safety.
- Effects that would violate Federal, State, Tribal, or local law protecting the environment. [40 CFR § 1501.3(b)]

None of the alternatives analyzed in this EA would violate any federal, state, tribal, or local laws that protect the environment.

3.3 Cumulative Impacts Methodology

In accordance with the CEQ revised regulations, this EA also considers cumulative impacts, “which are effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (federal or non-federal) or person undertakes such other actions” [(§1508.1(g)(3)]. Cumulative impacts have been addressed in this EA by resource and are considered for each alternative.

3.4 Trends and Reasonably Foreseeable Planned Actions

Climate Related Trends

Increases in mean annual temperature (+3.5°F–5.5°F by 2070), slight increases in mean annual precipitation (+3%–6% by 2070), increases in extreme heat events, and increases in storm frequency and intensity, flooding, and erosion are projected for the region due to climate change. These changes in climate will have far-reaching impacts on the St. Croix and Namekagon Rivers and terrestrial and aquatic environments at Riverway. Changes in species composition, increases in wildfire frequency, and increases in invasive species are possible, along with impacts on cultural resources, visitor experience, and operations within the Riverway (NPS 2014; NPS 2017; NPS 2023c).

Visitor Use Related Trends

Annual visitation at St. Croix National Scenic Riverway has grown by multiple factors in the past decade. In 2022, approximately 833,000 visitors came to the park unit, compared to approximately 221,000 in 2010 (NPS 2023a). This trend is anticipated to continue. Though visitor counts are not regularly carried out at Fairy Falls Day Use Area, anecdotal reports from NPS staff, neighbors, and municipal partners indicate that visitation to the site has increased in recent years.

Reasonably Foreseeable Future Projects

Regional Trail Planning and Implementation: Washington County and partners are undertaking a regional trail corridor planning effort for the Middle St. Croix Valley. The planning area includes eastern Washington County from the St. Croix Boom Site to County Road 18 in Afton, including lands near and adjacent to St. Croix National Scenic Riverway and near Fairy Falls Day Use Area (Washington County, Minnesota 2023).

Comprehensive River Management Plan (CRMP): The NPS is undertaking a comprehensive river planning effort over the next several years. The plan will provide long-term guidance for managing outstandingly remarkable values of the St. Croix and Namekagon rivers as well as related actions. The planning effort will include opportunities for public engagement.

3.5 Soils

Affected Environment

Fairy Falls Day Use Area contains a 50-foot-tall waterfall and deep ravine with stone cliffs below it. Fairy Falls Day Use Area currently contains approximately 2 miles of unmaintained and undesignated trails. These trails are largely hard-packed natural surface with some large boulders and rock formations. Soil erosion has occurred over time, particularly in areas with steeper slopes and higher visitor use. Soil erosion causes impacts on nearby Silver Creek and poses safety hazards for visitors. The project area contains soils that are identified as well drained to excessively drained (UMD-NRRI 2022).

The area in which the proposed parking lot would be constructed contains soils that have been identified as excessively drained loamy sand that transitions to gravelly coarse sand after a depth of 8 inches (NRCS 2023).

Environmental Consequences

Alternative A: No Action Alternative

Under the no action alternative, the proposed action would not be undertaken. There would be no effects of new trail construction or parking lot construction and use on soils. Occasional trail maintenance would occur on the existing undesignated trails to mitigate areas of soil erosion that pose safety hazards to visitors.

Cumulative Impacts: When combined with past, present, and reasonably foreseeable future actions and trends, the no action alternative could result in negative impacts to soils at Fairy Falls Day Use Area. Likely increases in storm frequency and erosion as well as increased visitor use may combine with ongoing soil erosion and undesignated trail creation and use, resulting in long-term localized, minor adverse cumulative impacts on soils.

Alternative B: Action Alternative

Within the Fairy Falls Day Use Area, the proposed action would result in creation of new, short trail sections in specific locations to improve soil erosion and improve safety for visitors. Trail maintenance would occur throughout the site due to the formalization of a loop trail system. Trail maintenance workdays would occasionally take place with local volunteers and partners. Improved signage and trail markers would reduce off-trail uses including creation of undesignated trails and soil erosion on steep slopes. Trail maintenance, volunteer workdays, and the placement of additional signage would have short-term adverse impacts on soils in very localized areas. However, these activities would create long-term direct and indirect beneficial effects by reducing soil erosion and related safety hazards on designated trails, undesignated trails, and in areas with steep, less vegetated slopes.

The proposed parking lot may be constructed on some areas that include previously disturbed and compacted soils. There would be long-term adverse impacts of the parking lot on the soils at that location. Parking lot design would include green infrastructure and features to mitigate flow of rain and snowmelt into nearby private lands and Silver Creek. In the long-term, the construction of a parking lot would have beneficial impacts to soils by providing a stable, non-erosive location for visitor parking.

Any soil disturbance from new trail construction, current trail rerouting, parking lot construction, or other NPS management activities at Fairy Falls Day Use Area would be subject to the mitigation measures and best management practices included in Table 4.

Cumulative Impacts: When combined with past, present, and reasonably foreseeable future

actions and trends, the proposed action could result in minor beneficial impacts to soils at Fairy Falls Day Use Area. Ongoing climate impacts on geology and soils such as storm frequency and erosion, as well as increased visitor use, may combine with the positive impacts of a formal, marked trail system and improved visitor use management, resulting in long-term localized, minor beneficial cumulative impacts to geology and soils.

3.6 Vegetation

Affected Environment

The Fairy Falls Day Use Area is noted as having “outstanding biodiversity”. It contains mesic upland hardwood and upland prairie systems as well as wetlands in the lower reaches of Silver Creek (UMD-NRRI 2022). The pre-settlement forest was likely dominated by oak woodland and forest, with some pine and spruce. Following logging in the site and nearby, agricultural land and oak forest were likely dominant. Most of the agricultural land at the site has since converted to fields of oak, aspen, hickory, and butternut (NPS 2018).

Upland and red oak woodlands and black ash mixed forests are found in this region of the Riverway. These forests support fire-dependent species, which in the absence of fire and due to impacts of the emerald ash borer, are likely to support more shade-tolerant mesic hardwoods in the future. Bur oak, white oak, and northern pin oak are also found on the site.

The hill prairie community, located in the northern portion of Fairy Falls Day Use Area, may contain little blue stem, big blue stem, needle grass, side-oats grama, June grass, hairy grama, and muhly grass. In the absence of fire, woody plant invasion has reduced many of these plant communities to small areas. Some areas likely reverted to prairie conditions from previously cleared agricultural areas. The dry bluffs above Silver Creek are home to different prairie species, sometimes termed a “goat prairie”. Invasive plants found throughout the Day Use Area include common buckthorn, round-leaved bittersweet, bush honeysuckle, Grecian foxglove, small-leaved bramble, garlic mustard, and Japanese barberry, as well as spotted knapweed, exotic thistles, and exotic cool season grasses. Special status plant species occur on the site and are discussed below in Section 3.3.

The project area also includes vegetation from past agricultural use. These include an apple orchard of approximately 15 trees, a red pine plantation planted for lumber in an area approximately 200-feet by 20-feet, and an approximately half-acre sugar bush that was planted for maple syrup. A large raspberry farm was also located on this site at one time. The red pine and sugar maples were likely planted before 1938, while the apple orchard was likely planted after 1964. These localized areas of prior agricultural use contribute to the rural character of the site (NPS 2018).

Environmental Consequences

Alternative A: No Action Alternative

Under the no action alternative, the proposed action would not be undertaken. There would be no effects of new trail maintenance or parking lot construction and use on vegetation. Occasional hazard tree mitigation may occur to improve visitor safety, and targeted invasive plant management would still occur. Rare species monitoring would also continue under the no action alternative.

Cumulative Impacts: When combined with past, present, and reasonably foreseeable future actions and trends, the no action alternative could result in negative impacts to vegetation at Fairy Falls Day Use Area. Possible increases in invasive species as well as increased visitor use may combine with ongoing vegetation trampling from undesignated trail creation and use, resulting in long-term localized, minor adverse cumulative impacts on vegetation.

Alternative B: Action Alternative

In Fairy Falls Day Use Area, the proposed action would result in localized vegetation removal to improve safety, relocate existing trail sections, and create a loop trail system. Because the loop trail system would, in large part, follow existing trails, vegetation removal would be minimized to necessary locations and would likely be limited to shrubs, woody plants, and herbaceous layer vegetation. Few, if any, intact large trees would need to be removed for the natural-surface loop trail to be established. For the most part there is sufficient space between trees to allow for a path to meander through them. Existing large trees may need to be removed if the trail alignment needs to be adjusted for sustainability purposes (e.g., reducing slope, incorporating a switchback, etc.), however options to preserve existing trees would be prioritized over those that require removal. Tree removal would be unlikely for trail construction, and hazard trees would be removed per the park's Hazard Tree Management Plan. Understory vegetation may be impacted by trail construction. Sensitive species would be identified in the process of determining the ultimate location of the trail. Woody invasive species would be removed and treated. The trail segment going through the old orchard will initially need to be mowed to define the path. The expectation is that regular trail use by visitors and staff would maintain that path over time.

These short-term, minor adverse impacts on vegetation would be mitigated by direct and indirect long-term, beneficial impacts of additional closures of undesignated trails and better signage, which would reduce vegetation damage in other parts of the project area.

The proposed action would include trail maintenance, undesignated trail restoration, and invasive plant monitoring by staff, partners, and volunteers, which would allow for earlier detection of invasive vegetation across the site. Additionally, the proposed action includes creation of a native species restoration plan that would have beneficial impacts by identifying key species, actions, and needs for protection of native biodiversity at the site.

Interpretive materials about natural resources would be developed to share information with visitors about the habitats and species at Fairy Falls Day Use Area. The type of interpretive media and its method of distribution would need to be determined. Occasional interpretive programs would allow visitors to learn about the natural resources at the site and their connection to the larger the Riverway. In the long-term, public knowledge about habitats at Fairy Falls Day Use Area could improve native species protection and identification of invasive species at Fairy Falls Day Use Area.

In the area proposed for a parking lot, the terrace was a farm field as recently as the 1960s. Vegetation on the terrace now is largely forested cover except under the utility line right-of-way. Under the utility line, the vegetation consists of a mix of native and nonnative species. Woody invasive species have been identified in the area outlined for the parking lot. Mature trees will need to be removed for construction of the parking lot. Any vegetation disturbance or removal from new trail construction, current trail rerouting, parking lot construction, or other NPS management activities at Fairy Falls Day Use Area would be subject to the mitigation measures and best management practices included in Table 3.

Cumulative Impacts: When combined with past, present, and reasonably foreseeable future actions and trends, the proposed action could result in minor, beneficial impacts to vegetation at Fairy Falls Day Use Area. Possible increases in invasive species as well as increased visitor use may be mitigated by improved invasive and native plant management, improved partnership and monitoring opportunities, and creation of an established loop trail system to reduce undesignated trail impacts. This would result in long-term localized, minor beneficial cumulative impacts on vegetation.

3.7 Special Status Species

Affected Environment

Two federally listed endangered species (northern long-eared bat and rusty patched bumble bee) and one proposed endangered species (tricolored bat) found in the park may be impacted by the proposed action.

Two state listed threatened species (kitten-tails and fernleaf false foxglove) may also be impacted by the proposed action. Two other state listed species of concern (Goldie's fern and Louisiana waterthrush) may be found in or near the project area but are unlikely to be impacted by the proposed action.

Northern long-eared bat (*Myotis septentrionalis*) is a federally listed endangered 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 (USFWS 2024b). There are no known maternity roosts or hibernacula at Fairy Falls Day Use Area.

Rusty patched bumble bee (*Bombus affinis*) is an insect that is found across the upper Midwest, and which experienced a widespread, steep decline in population in the past decade (USFWS 2021; USFWS 2024c). The rusty patched bumble bee nests underground or at the soil surface in upland grasslands and shrublands. They are active spring through fall and live in colonies of one queen and more than one thousand workers who work to protect the colony, forage, and protect the young. This species has an annual life cycle and new queens require overwintering habitat, usually underground in rodent burrows. This species is found in the eastern Minnesota region including habitat near Stillwater and Fairy Falls Day Use Area (see range map linked at USFWS 2021). Fairy Falls Day Use Area lies within the rusty patched bumble bee high potential zone. The presence of this species at this location is probable due to other known nearby occurrences and available habitat.

Tricolored bat (*Perimyotis subflavus*) is one of the smallest North American bats and is distinguished by tricolored fur that ranges from yellowish to orange. It uses caves, road culverts, and abandoned mines as roosts in winter, and is found in forested habitats among leaves of live or recently dead deciduous hardwood trees in spring, summer, and fall. Like many bats, tricolor bats face extinction due to the impacts of white-nose syndrome (USFWS 2024d). Acoustic bat monitoring is conducted annually in 30 locations throughout the Riverway. These monitoring efforts have confirmed the presence of tricolored bats within the Riverway using transient data, supporting probable presence of this species due to available habitat and surrounding landscape. There are no known maternity roosts or hibernacula at Fairy Falls Day Use Area.

Fernleaf false foxglove (*Aureolaria pedicularia*), a state listed threatened species is known to occur near the Silver Creek drainage (CMSCWD 2021). This tall, bushy plant lives in dry savannas and oak woodlands of east-central and southeastern Minnesota and relies on oak roots for survival. Its decline is attributed to conversion of land to urban and agricultural uses as well as the impacts of fire suppression (MNDNR 2023a).

Kitten-tails (*Besseyia bullii*), a state listed threatened species, is a member of the figwort family. In the project area, it is found along bluff edges in drier, forested areas (NPS 2018; MNDNR 2023b). This species is found in oak savanna habitat and relies on native bees for pollination. Habitat loss and degradation have resulted in a significant decline in kitten-tails' broader range, and Minnesota may serve as an important remaining population center (MNDNR 2023b).

Environmental Consequences

Alternative A: No Action Alternative

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

Cumulative Impacts: When combined with past, present, and reasonably foreseeable future actions and trends, the no action alternative could result in negative impacts to special status species at Fairy Falls Day Use Area. Possible increases in invasive species and other climate impacts as well as increased visitor use may combine with ongoing habitat disturbance and trampling from undesignated trail creation and use, resulting in long-term localized, minor adverse cumulative impacts on special

status species and their habitats.

Alternative B: Action Alternative

Under the proposed action, localized vegetation removal would occur for the development of a loop trail. Much of the loop trail would be established along existing trail routes, minimizing the need for widespread vegetation removal. Trees and other larger vegetation would be preserved whenever possible, except where they present hazards to visitor use. Visitor use is not expected to increase significantly with a loop trail, though visitor use patterns may be more widespread throughout the site and thus potentially impact special status species throughout Fairy Falls Day Use Area. A formalized trail system would allow NPS to direct visitor use away from sensitive areas.

Vegetation removal for trail construction or safety features may have adverse impacts on the availability of habitat for rusty patched bumble bee and occurrences of kitten-tails and fernleaf false foxglove. Informal surveys for these species would be conducted prior to trail maintenance, construction of new trail sections, and possible construction of a parking lot.

Future hazard tree removal may reduce the number and type of trees available for northern long-eared bat and tricolor 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 loop trail and would only constitute a small number of trees compared to the number of trees in and near the project area. Similarly, possible future parking lot construction may affect listed bat species, due to possible tree removal. However, impacts would be negligible due to the proposed parking lot location and surrounding habitat.

Therefore, the proposed action would add negligible to minor additional impacts on northern long-eared bats and tricolor bats 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 and tricolor bats in the action area. Population-level impacts to these bats would not occur from the proposed action.

The proposed action would add negligible to minor additional impacts on rusty patched bumble bee by possibly reducing habitat. The project may affect but is not likely to adversely affect rusty patched bumble bee in the action area. Population-level impacts to the bees would not occur from the proposed action.

Overall, impacts to species of concern 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 3).

Cumulative Impacts: When combined with past, present, and reasonably foreseeable future actions and trends, the proposed action could result in beneficial impacts to special status species at Fairy Falls Day Use Area. Possible increases in invasive species, habitat loss, spread of white-nose syndrome, and climate impacts as well as increased visitor use may be mitigated by improved invasive and native plant management, improved partnership and monitoring opportunities, and creation of an established loop trail system to reduce widespread visitor impacts at Fairy Falls Day Use Area. This would result in long-term localized, minor beneficial cumulative impacts on special status species.

3.8 Cultural Resources

Affected Environment

People have interacted with the site now known as Fairy Falls for thousands of years, and there is evidence that points to many eras of use over time. To better understand what remains, the NPS commissioned an assessment of the Fairy Falls landscape by consultant Mundus Bishop in 2018. Their

report *Arcola Bluffs and Fairy Falls Cultural Landscape Assessment* describes, “Cultural resource features from several periods remain in Fairy Falls. These include archeological sites, prehistoric use, and remnants of logging and agricultural uses.” While the report recommends that “neither the site nor its collection of cultural resource features meet the criterion for eligibility for listing in the National Register of Historic Places” it acknowledges that the extant cultural features and the stories associated with them continue to enhance the visitor’s experience of the place and provide important opportunities for interpretation to contribute to the public’s understanding and appreciation of the site.

Cultural resources identified in the cultural landscape assessment include the apple orchard, pine plantation, and sugar bush. These resources associated with people’s past agricultural use of the site are now integrated into the landscape. Views to, from, and including these areas are important components of the cultural resource features of the site. These resources highlight the agricultural and logging uses near Fairy Falls.

The waterfall itself is considered a cultural resource feature, as are views to and from the falls to other areas of the site. There is a cold storage cave built into the side of the bluffs above the confluence of Silver Creek and the St. Croix River. It is likely this man-made structure was associated with a slaughterhouse on the site in the late 1800s, of which no remnants remain (NPS 2018).

In 2021, the NPS Midwest Archeological Center (MWAC) excavated a transect of six shovel tests across the area where a parking lot could be developed. One test contained a single, corroded ferrous metal fence staple, and another contained a fragment of a cut nail shank and a piece of wire (both corroded). These were not considered significant, and the area of the transect appeared mostly devoid of archeological resources. Additional archeological testing would be required if and when the parking lot location and design become better defined (NPS 2021). In 2023, MWAC returned to the project area and documented the remnants of at least two building foundations near the southwestern edge of the proposed parking lot area. Based on historical aerial photos, these are believed to be barns from the time the Geidel family lived and farmed at the site. These would be further evaluated and considered relative to project-specific plans, including final placement and design, for a parking lot. Additional testing would also be proposed based on the final alignment and design of the loop trail, connector trail, and in areas where lighting, kiosks, and signage are proposed once these are identified. (NPS 2023b).

Environmental Consequences

Alternative A: No Action Alternative

Under the no action alternative, the proposed action would not be undertaken. There would be no effects of loop trail maintenance or construction or parking lot construction and use on cultural resources. No interpretation of cultural resources would occur via signage.

Cumulative Impacts: When combined with past, present, and reasonably foreseeable future actions and trends, the no action alternative could result in negative impacts to cultural resources at Fairy Falls Day Use Area. Possible increases in flooding, erosion, and other climate impacts as well as increased visitor use at or in cultural resources at Fairy Falls may combine with ongoing habitat disturbance and illicit activities and damage to cultural resources, resulting in long-term localized, minor adverse cumulative impacts on cultural resources. Because visitors would continue to direct the type and location of their use in an ad hoc manner, there could be significant impacts, over time, to documented and undocumented cultural resources.

Alternative B: Action Alternative

The integration of Tribal partners’ cultural connections to the site would enhance the NPS stewardship and interpretation for visitors, supporting long-term protection and understanding of the site’s cultural history.

The NPS would develop interpretive materials to provide information to visitors about the apple orchard, pine plantation, sugar bush, cold storage cave, and related agricultural uses at the site.

Interpretive materials and occasional programming would allow visitors to better understand the cultural resources at and history of the site and its connection to the broader St. Croix National Scenic Riverway. In the long-term, public understanding of the human history at Fairy Falls Day Use Area could improve its protection. The development of dedicated parking on NPS land and a formal loop trail system would provide visitors with a more focused, cohesive experience that would minimize the current ad hoc nature of visitor behavior and circulation. It would also enable the NPS to direct visitor use and traffic to those areas that are appropriate for visitation and interpretation while avoiding areas that may be considered more sensitive. This should minimize unintended effects to cultural resources at the site and facilitate a greater understanding and appreciation for the site's history.

Cumulative Impacts: When combined with past, present, and reasonably foreseeable future actions and trends, the proposed action could result in beneficial impacts to cultural resources at Fairy Falls Day Use Area. Possible increases in flooding, erosion, and other climate impacts as well as increased visitor use at or in cultural resources at Fairy Falls may be mitigated through better trail maintenance and increased law enforcement presence, and improved public awareness and protection of cultural resources, resulting in long-term localized, minor beneficial cumulative impacts on cultural resources.

3.9 Visitor Use and Experience

Affected Environment

The current visitor entrance to Fairy Falls Day Use Area is approximately one-quarter mile northwest from Minnesota State Highway 95 on Fairy Falls Road. Visitor access to Fairy Falls Day Use Area is currently characterized by trails that lead from Fairy Falls Road near Orwell Avenue into the site itself. This point of access is about 100 feet uphill from the top of the falls. There is an entrance sign at this point of access, on which NPS contact information, rules and regulations for use, and a map are posted. No other interpretive or directional signs are within the site. Carsonite posts mark the NPS property boundary in various locations around the entire day use area to inform visitors of the boundary between public and private lands. No nearby pedestrian or hiking trails connect to Fairy Falls. Limited parking (approximately six spaces) is available along Orwell Avenue, for which the NPS coordinates with Stillwater Township to provide.

There are undesignated trails (which are unmarked, unofficial, and unmaintained) around the waterfall, near the adjacent bluffs, and into the interior of the day use area, including the sugar bush, apple orchard, and pine plantation. Some of the trails near the waterfall are especially eroded due to years of human use along the steep bluffs, causing safety concerns.

Fairy Falls Day Use Area is open from sunrise to sunset. No campfires, overnight use, or bikes are allowed. Visitor activities include hiking, nature viewing, photography, and occasionally ice climbing. Illicit activities include underage drinking, graffiti, littering and trash disposal. NPS law enforcement patrol the site, and facilities and resource management staff carry out infrequent site assessments to identify and manage invasive plants, address safety concerns along the trails, and remove trash. Deer archery hunting is permitted at Fairy Falls Day Use Area pursuant to state and federal laws. When needed, emergency medical services, law enforcement, and fire protection are provided through partnerships between the Riverway and local agencies.

Environmental Consequences

Alternative A: No Action Alternative

Under the no action alternative, the proposed action would not be undertaken. There would be no effects of loop trail maintenance, the provision of safe viewing sites for the waterfall, or parking lot construction and use on visitor use and experience. Occasional trail maintenance and hazard tree removal would occur to mitigate safety hazards to visitors, and occasional law enforcement patrols would continue. Partnerships between the Riverway and local emergency medical services, law enforcement, and fire districts would continue. Visitors would continue to be able to travel the informal, unmaintained trail with current access. Riverway staff would continue to monitor, evaluate and address safety concerns.

Cumulative Impacts: When combined with past, present, and reasonably foreseeable future actions and trends, the no action alternative could result in negative impacts on visitor use and experience at Fairy Falls Day Use Area. Possible increases in flooding, erosion, and invasive species, combined with increased visitor use at Fairy Falls may combine with ongoing erosion, safety concerns, and illicit activities, resulting in long-term localized, minor adverse cumulative impacts on visitor use and experience.

Alternative B: Action Alternative

The establishment of a loop trail with interpretation would have beneficial impacts to visitor use and experience under the proposed action because it would provide additional opportunities for recreation and education across the site. The loop trail system would respond to strong public interest in having safe, well-marked trails into the interior of the site while protecting special habitats along the lower portions of Silver Creek. The signage and interpretive media would be determined as the

proposed action is designed and implemented. The loop trail system and associated visitor use and occasional interpretive programming would also respond to the purpose and need to provide improved safety and NPS presence at Fairy Falls Day Use Area. Enforcement for littering and defacing of NPS property would be enhanced, decreasing illegal activities and providing a safer and more enjoyable environment for visitors. Establishment of a loop trail system would have long-term beneficial impacts on visitor use and enjoyment and human safety at the waterfall itself as well as in the interior portions of the site.

If a parking lot were constructed, there would be negligible short-term impacts on visitors, since no parking or other use currently exists on the NPS property at that location. However, in the long-term, it would provide beneficial impacts on visitor use and experience, including potential visitor amenities, such as interpretive information and maps, trash and recycling facilities, bicycle parking, and possibly a vault toilet. It may also alleviate parking impacts along Orwell Avenue or elsewhere. The parking lot would also provide a staging area for emergency personnel and law enforcement responses at Fairy Falls Day Use Area and nearby, creating long-term benefits for human safety.

The connection between Fairy Falls Day Use Area, St. Croix National Scenic Riverway, and other regional trails and recreation sites would be enhanced under the proposed action. Continued dialog between the NPS and its partners about possible trail connections and transit options for visitors would have long-term benefits for the local community as well as visitors.

Cumulative Impacts: When combined with past, present, and reasonably foreseeable future actions and trends, the proposed action would result in beneficial impacts on visitor use and experience at Fairy Falls Day Use Area. Possible increases in flooding, erosion, and invasive species, combined with increased visitor use at Fairy Falls may be mitigated through better trail maintenance and increased law enforcement presence, better signage and interpretive information, improved human safety, and improved public awareness and protection of park resources, resulting in long-term localized, minor beneficial cumulative impacts on visitor use and experience

CHAPTER 4: MITIGATIONS AND MINIMIZATION MEASURES

4.0 Introduction

The NPS strives to avoid, minimize, and mitigate adverse environmental impacts resulting from their proposed actions. To ensure the protection of natural resources and the quality of visitor experience, the NPS is committed to implementing the measures detailed in the following subsections. 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 3 details project design criteria (PDC) and best management practices (BMPs) incorporated into alternative B 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, policies, and guidance; NPS professional and scientific recommendations; or from experience in implementing similar projects. The PDC and BMPs provided in Table 3 are considered common practices for trail construction projects to prevent or decrease potential resource impacts. 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. Additional PDC and BMPs may be added as a result of ongoing consultation with partner entities and as project plans become further developed and better defined.

Table 3. Project Design Criteria and Best Management Practices

Project Phase	PDC and BMPs
General	<ul style="list-style-type: none">• New or improved sections of the trail shall be designed and constructed using natural topography to provide adequate drainage away from wetlands and water bodies.• To provide for proper drainage, trails 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 unanticipated historic or archeologic resources are located during planning activities or construction activities, all construction in the immediate vicinity shall cease, the NPS shall be notified, and properties shall be treated as specified in 36 CFR Part 800, Protection of Historic Properties. The NPS will consult with the MN SHPO and federally recognized American Indian Tribes pursuant to 36 CFR Part 800 and other applicable laws and policies.• If a discovery of human remains or cultural items is made, NPS will follow NAGPRA and its associated regulations in 43 CFR Part 10.• 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 partners before construction may begin.• NPS staff shall provide noxious weed management guidelines for use by contractors or volunteers prior to implementation of any ground-disturbing activities.• NPS staff, volunteers, contractors, 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

	<p>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.</p> <ul style="list-style-type: none"> • "Leave trees" and trail clearing limits shall be adequately marked. Prior to commencement of any earthwork, flagging will be located on the sites to ensure that machine-operated activity is focused on targeted areas only. • NPS staff shall train contractors, volunteers, and partners on identification of species of concern and provide guidelines on suitable plan of action should they be encountered. • A plan for runoff from the proposed parking area shall be developed during site planning, incorporating setbacks for required slope and runoff protection (per Cooperative Management Plan, NPS 2002) and screening. • Continued consultation with MnDOT shall be required to accommodate a turn lane and access off Highway 95. • Parking lot design should avoid impacts on the overhead electric utility line and poles in the vicinity of the proposed parking lot.
During Construction	<ul style="list-style-type: none"> • Stumps in the trails shall be cut as low as possible to the ground to avoid safety hazards. Stumps should not be pulled or ground unless compliance has been performed to provide for this treatment. • 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 non-waste 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. • 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 may 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"> • If needed, trail edges will be promptly revegetated upon completion of trail work 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. • NPS staff shall be notified if undesignated trails are developed by third parties. These trails shall be promptly deconstructed and reclaimed under NPS guidance. • 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 trail maintenance or parking lot 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.

	<ul style="list-style-type: none"> • Any erosion control fabric that might be used shall be net-free and plastic-free, to prevent wildlife entrapment. • 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 regular maintenance to ensure that impacts are minimized, and drainage management is implemented. • If requested by the NPS, partners, volunteers, or contractor, a post-construction site visit will be convened.
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CHAPTER 5: CONSULTATION AND COORDINATION

5.0 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 Tribal Nations, 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.

5.1 Internal Scoping

Internal scoping was conducted during the entire project, including meetings with Riverway staff and NPS regional partners including but not limited to meetings December 2021, March 2022, July 2022, and January 2023. Site visits with Riverway staff and NPS regional partners occurred throughout the planning process, including but not limited to September 2021, October 2022, January 2023, February 2023, and May 2023. Additionally, a small team made up of four park staff, one regional representative, and one consultant met approximately monthly throughout the entire project. Updates were also provided by the small team to Riverway management staff and regional representatives approximately every two months throughout the project.

5.2 Federal Agencies

U.S. Fish and Wildlife Service Consultation

To understand possible impacts of the proposed action on special status species, the extent of habitat loss, and short- and long-term disturbance were considered. Species profiles and other pertinent information from the U.S. Fish and Wildlife Service (USFWS 2024a) and Minnesota Department of Natural Resources and Natural Heritage Area data were gathered to provide a general assessment of likely habitat in the project area. The proposed action may affect but is not likely to adversely affect northern long-eared bat, rusty patched bumble bee, and tricolor bat at St. Croix National Scenic Riverway (see Table 4). Population-level impacts would not occur. No effects to other federally listed species would occur.

Table 4. Determination of Effects for Federally Listed Species

Common Name, <i>Scientific Name</i>	Presence in St. Croix National Scenic Riverway near project area	Listing Status	Section 7 Effect Determination*
Northern long-eared bat, <i>Myotis septentrionalis</i>	Confirmed	Endangered	MA/NLAA
Rusty patched bumble bee, <i>Bombus affinis</i>	Probable due to other nearby known occurrences and available habitat	Endangered	MA/NLAA
Tricolor bat, <i>Perimyotis subflavus</i>	Probable due to available habitat and surrounding landscape	Proposed Endangered	MA/NLAA
*MA/NLAA = May Affect, Not Likely to Adversely Affect			

5.3 Tribal Partners

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
Iowa Tribe of Kansas and Nebraska
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

NPS staff met with Tribal partners throughout this planning process to discuss the project and learn about Tribal cultural connections and history in and near the project area. In February 2021, the NPS initiated consultation with the nineteen federally recognized American Indian Tribes listed above, sharing information about the proposed undertaking and inviting them to consult on the project. Of the Tribal partners contacted, five Tribes expressed interest in consulting on the planning process for Fairy Falls: Lower Sioux Indian Community (LSIC), Mille Lacs Band of Ojibwe (MLBO), Prairie Island Indian Community (PIIC), Shakopee Mdewakanton Sioux Community (SMSC), and Upper Sioux Community (USC).

The NPS hosted an overview of the site and project via Microsoft Teams on July 15, 2021. The NPS then hosted an in-person site visit to Fairy Falls on July 21, 2021. Seven representatives from four Tribal Nations (MLBO, PIIC, SMSC, and USC) attended. A representative from MLBO also visited the site on November 3, 2021. The NPS summarized the initial feedback received from Tribal partners into four key themes about Fairy Falls Day Use Area and its environs that would inform site management: This Site is a Home, A Light Hand, Intactness, and Keeping it Whole. THPO staff from USC returned to the site to do additional Tribal survey work on April 26, 2022. The NPS intends to continue to consult with Tribal partners as project-specific plans become more refined to ensure that plans reflect Tribal perspectives and protect what is culturally significant about the site to Tribes.

5.4 State Agencies

Minnesota Department of Natural Resources: The Minnesota Department of Natural Resources has been consulted throughout this process, including informal conversations among staff peers, discussions during interagency meetings, and invitations to public meetings. The Minnesota Department of Natural Resources provided comments during meetings and formal comment periods. Additional communications, consultation, and planning will occur as components of this plan are implemented.

Minnesota Department of Transportation: The Minnesota Department of Transportation has been consulted throughout this process, including informal conversations among staff peers, discussions during interagency meetings, and invitations to public meetings. The Minnesota Department of Transportation provided comments during meetings and formal comment periods. Additional communications, consultation, and planning will occur as components of this plan are implemented.

Minnesota State Historical Preservation Office: The NPS has shared a copy of the Environmental Assessment with the Minnesota State Historic Preservation Office (SHPO) to seek any input or comments that they may have on the draft EA at this time. As specific project plans are developed for the Fairy Falls Day Use Area, they will be reviewed pursuant to the Streamlined Review Process or Standard Review Process as stipulated in the Programmatic Agreement among the National Park Service (U.S. Department of the Interior), the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers for Compliance with Section 106 of the National Historic Preservation Act. This 2008 Nationwide Programmatic Agreement stipulates how NPS operations and projects will comply with Section 106 of the National Historic Preservation Act of 1966, as amended and 36 CFR Part 800.

5.5 Local Agencies

Carnelian Marine St. Croix Watershed District
City of Stillwater
Stillwater Township
Washington County
Washington Conservation District

Local agencies have been consulted throughout this process, including informal conversations among staff peers, discussions during interagency meetings, and invitations to public meetings. The agencies listed above provided comments during meetings and formal comment periods. Additional communications, consultation, and planning will occur as components of this plan are implemented.

5.6 Public Scoping

Throughout this planning process, Riverway staff invited public comments to gather input and ideas for the future of Fairy Falls Day Use Area. In October and November 2021, the Riverway held two virtual open houses to collect ideas from the public about the future of Fairy Falls Day Use Area. Comments were accepted for 30 days. In summer 2022, park staff met with local agency stakeholders to discuss site options such as parking and access. In February and March 2023, options for the site were shared with the public for their input, and comments were accepted for 45 days.

This Environmental Assessment will be available for public review during a 30-day comment period in Summer 2024. Comments from the public will be addressed and summarized in the

decision documentation for this proposed federal action.

CHAPTER 6: ACRONYMS AND ABBREVIATIONS

ADA	Americans with Disabilities Act
BMP	Best Management Practice
CFR	Code of Federal Regulation
CLA	Cultural Landscape Assessment
DNR	Department of Natural Resources
EA	Environmental Assessment
IDT	Interdisciplinary Team
IPaC	Information for Planning and Consultation
MA	May Affect
MnDOT	Minnesota Department of Transportation
MWAC	Midwest Archeological Center
NE	No Effect
NEPA	National Environmental Policy Act of 1969
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
SHPO	State Historic Preservation Office
THPO	Tribal 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 7: 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:

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Carnelian Marine St. Croix Watershed District (CMSCWD)

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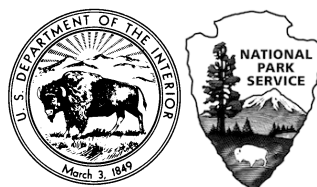
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NPS SACN JUNE 2024

US Department of the Interior – National Park Service