



National Park Service  
U.S. Department of the Interior

Pictured Rocks National Lakeshore  
Munising, Michigan

# Miners Falls Viewing Platforms and Steps Replacement Environmental Assessment

June 2024





## Executive Summary

Pictured Rocks National Lakeshore proposes to replace the viewing platforms and their associated stair structures for visitors to view the natural feature at the terminus of the Miners Falls Trail. The purpose of this project is to provide safe public access to the Miners River and base of Miners Falls, while reducing impacts to the natural environment.

This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA); Council on Environmental Quality implementing regulations effective April 20, 2022, [40 Code of Federal Regulations (CFR) 1500-1508]; NPS Director's Order 12: *Conservation Planning, Environmental Impact Analysis, and Decision Making* (NPS 2011), and the NPS NEPA Handbook (NPS 2015). Compliance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (54 United States Code [USC] 306108), and Section 7 of the Endangered Species Act (ESA) is being conducted concurrently with the NEPA process.

This EA provides a decision-making framework that: 1) Assesses a reasonable range of alternatives to meet the purpose of the proposed action; 2) Evaluates potential issues and impacts to the natural and cultural resources of the park; and 3) Identifies required mitigation measures to lessen the degree or extent of any potential adverse environmental impacts.

The EA evaluates three alternatives; No-Action Alternative: No Improvements, Alternative 1: Extend Steps and Construct Rustic Trail to Bottom of Ravine (Preferred Alternative), and Alternative 2: Extend Steps to Bottom of Ravine. Under the No-Action Alternative, no improvements would be made to the Miners Falls overlooks and staircase. Under Alternative 1 (Preferred Alternative), the existing infrastructure (upper and lower platforms and staircase) would be replaced, and a new rustic-style trail would be constructed, extending from the new lower viewing platform to the bottom of the ravine (valley floor). Under Alternative 2, the existing infrastructure would be replaced (upper and lower platforms and staircase), and a new staircase would be constructed, extending from the new lower viewing platform to the bottom of the ravine (valley floor). The alternatives are described in detail in Chapter 2.

This EA identifies the categories of the resources, or Impact Topics, found within the project area that are most likely to be affected by the actions described in each alternative. These topics have undergone a detailed analysis to determine the most likely effects on the resources, and the mitigation required to avoid or lessen resource damage. A description of the existing conditions and potential impacts for each Impact Topic are presented in Chapter 3. Alternative 1 (Preferred Alternative) would result in no significant impacts to resources of the park.

## Public Comment

This EA will be available for public review for 30 days. The NPS Planning, Environment and Public Comment (PEPC) site provides access to current plans and related documents that are available for public review. Comments may be submitted online at <https://parkingplanning.gov/minersfalls> or

mailed to: David Horne, Superintendent, Pictured Rocks National Lakeshore, PO Box 40, Munising, MI 49862.

Before including address, phone number, email address or other personal identifying information, the public should be aware that the entire comment – including personal identifying information - may be made publicly available at any time. Requests can be made to withhold your personal identifying information from public review, but it cannot be guaranteed to be withheld.

## ACRONYMS AND ABBREVIATIONS

|        |  |
|--------|--|
| ABA    | Architectural Barriers Act                             |
| ABAAS  | Architectural Barriers Act Accessibility Standards     |
| APE    | Area of Potential Effect                               |
| BMP    | Best Management Practice                               |
| c.     | Circa  |
| CEQ    | Council On Environmental Quality                       |
| CFR    | Code of Federal Regulations                            |
| DO     | Director's Order                                       |
| EGLE   | Department of Environment, Great Lakes, and Energy     |
| EA     | Environmental Assessment                               |
| EPA    | Environmental Protection Agency                        |
| ESA    | Endangered Species Act                                 |
| EO     | Executive Order  |
| GMP    | General Management Plan                                |
| IDT    | Interdisciplinary Team                                 |
| IPaC   | Information for Planning and Consultation              |
| NEPA   | National Environmental Policy Act                      |
| NAGPRA | Native American Graves Protection and Repatriation Act |
| NHPA   | National Historic Preservation Act of 1966             |
| NPS    | National Park Service                                  |
| PEPC   | Planning, Environment, and Public Comment              |
| Park   | Pictured Rocks National Lakeshore                      |
| PL     | Public Law   |
| SHPO   | State Historic Preservation Officer                    |
| US     | United States  |
| USC    | United States Code                                     |
| USFWS  | United States Fish and Wildlife Service                |



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# 1 INTRODUCTION

## 1.1 BACKGROUND

The National Park Service (NPS) proposes to replace the viewing platforms and their associated stair structures by designing and constructing new staircase and overlook structures (the project) for visitors to view the natural feature at the terminus of the Miners Falls Trail (trail) in Pictured Rocks National Lakeshore (Park). **Figure 1** shows the project location. The viewing platforms currently consist of two observation decks: a 9' x 10' upper platform and a 14' x 8' lower platform with a timber stair structure connecting the two. An original third lower platform previously existed but had sloughed off the hillside (less than 50 years ago) and was removed at that time without replacement. The current remaining structures are near the end of their lifecycle and receive frequent maintenance by Park staff to sustain them. The platforms are in a location with natural resource considerations as well as structural challenges because of the steep slopes.

The Park is America's first National Lakeshore, established in 1966. It is located along the southern shore of Lake Superior on Michigan's Upper Peninsula. The Park encompasses 10 inland lakes, 22 backcountry campgrounds, and nearly 100 miles of trails. Historic resources include an 1874 lighthouse, maritime US Coast Guard buildings and artifacts, and early logging exhibits (NPS 2023).

Miners Falls Trail, the associated viewing platforms, and stair structures are used by tens of thousands of Park visitors annually. The trail is a 1.2-mile gravel path through dense forest that leads to two viewing platforms (an upper and lower) overlooking the waterfall. Miners Falls, the Park's most powerful waterfall, occurs where the Miners River drops approximately 50 feet over a sandstone outcrop. The trail promotes visitor experiences including natural sounds, nature viewing, accessibility, and appreciation of natural erosion processes. Miners River is home to brook and steelhead trout (*Salvelinus fontinalis* and *Oncorhynchus mykiss*, respectively) and is popular for fishing in the spring and fall.

The viewing platforms are constructed of treated timber and lumber. Due to age and location in a damp forested area with limited sun exposure, the structures are progressively deteriorating to a state of potential safety concerns for Park visitors. The staircase and lower observation deck are situated on a steep slope, extending approximately midway down the ravine. Currently, visitors are bypassing the lower platform and creating their own trails by walking down the terrain to gain a better view of Miners Falls and access to the river (see **Figure 2** and **Figure 3**).

Visitor behavior has created an unauthorized trail from the lower viewing platform down to the bottom of the ravine, also referred to as valley floor, and river. This unauthorized user-developed trail has contributed to instability of the vegetated hillslope and erosion issues, as well as created a safety risk for visitors. Due to the steep and remote nature of this location, the ability for Park responders to provide aid or rescue to the bottom of the valley in an emergency is difficult and creates further risk to safety for both visitors and responders. Historically, there is photographic

evidence that a previous staircase provided access to the bottom of the ravine. It is the intent of this project to design and construct a defined route of access to the valley floor for enhanced visitor experience at Miners Falls and reduce enticement of creating undesigned trails down the slope.

The project provides management guidance that is consistent with the Park's existing 2004 General Management Plan (GMP). The Park's GMP provides measures for the preservation of the area's resources, indications of types and general intensities of development associated with visitor use, identifies visitor carrying capacities, and addresses potential boundary changes in meeting the Park's statutory planning requirements (54 USC 100502). Changes in visitor use associated with the existing infrastructure at Miners Falls has occurred over time. These changes have been to type, pattern, and intensities of use and have necessitated the updated guidance provided by this project for the Miners Falls area.

### 1.1.1 Study Area

The EA study area (or area of analysis) includes the Miners Falls Trail to Miners River (see **Figures 4 – 6** in Chapter 2 for the study area). This boundary is also the Area of Potential Effect (APE) for the purposes of the assessment of effects to cultural resources and consultation requirements under Section 106 of the NHPA, as amended (54 USC 306108).









**Figure 2. Undesignated Trail Leading to Valley Floor**



**Figure 3. Hillslope Instability from Undesignated Use**



## 1.2 PURPOSE AND NEED

The purpose of this project is to provide safe public access to the Miners River and base of Miners Falls, while reducing impacts to the natural environment. The project is needed because the current infrastructure has deteriorated and needs replacement. The project is also needed because public demand for access to the river has created undesignated trails which are causing erosion and damage to vegetation.

## 1.3 RELATIONSHIP TO EXISTING LAWS, POLICIES, AND PLANS

Laws, policies, and existing plans related to management of park resources are consistent with the activities outlined in this document, including:

### 1.3.1 NPS Laws and Management Policies

In order to manage and preserve national park lands, Congress passed the NPS Organic Act in 1916 to establish the NPS. Specifically, the Organic Act declares that the NPS has a dual mission, both to conserve park resources and to provide for their use and enjoyment in such a manner and by such means as will leave them unimpaired for future generations.

The NPS has several sources of detailed guidance to help managers make day-to-day decisions. The primary source of guidance is the 2006 NPS Management Policies, which includes Director's Orders (DO), Handbooks, and Reference Manuals. These policies were for the preservation, management, and use of park resources and facilities service-wide. These policies provide guidelines and direction for management of resources within the park.

Director's Order #12 *Conservation Planning, Environmental Impact Analysis and Decision-Making* and associated 2015 NEPA Handbook set forth a planning process for incorporating scientific and technical information and establishing a solid administrative record for NPS projects. Other applicable DO's includes DO #77 which addresses Natural Resource Protection within specific guidance under DO #77-1: Wetland Protection and DO #77-2: Floodplain Management, both of which are applicable given their proximity to the project area.

Various Department of the Interior (DOI) guidance establish the legal and policy foundation for management approaches that the NPS used to address current and future effects of climate change. The intent of this guidance is to ensure that decisions affecting natural and cultural resources will be informed by and responsive to the existing and projected climate change and other natural hazards.

### 1.3.2 Other Federal Laws

The NPS is also required to comply with the following laws and policies related to this project.

### **1.3.2.1 National Environmental Policy Act**

The National Environmental Policy Act (NEPA) of 1969, as amended applies to a broad range of federal actions; Section 102(2) mandates that before federal agencies make decisions, they must consider the effects of their actions and its alternatives on the quality of the human environment. NEPA created and assigned the Council on Environmental Quality (CEQ) the task of ensuring that federal agencies meet their obligations under NEPA. The NPS has adopted procedures to comply with the act and the CEQ regulations, as found in DO #12 and the NEPA handbook.

### **1.3.2.2 Endangered Species Act**

The Endangered Species Act (ESA) of 1973 requires all federal agencies to consult with the Secretary of the Interior on all projects and proposals with the potential to impact federally endangered or threatened plants and animals. It also requires agencies to use their authorities in furtherance of the purposes of the ESA by carrying out programs for the conservation of endangered and threatened species. The ESA is administered by the U.S. Fish and Wildlife Services (USFWS) for terrestrial and freshwater species and the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NOAA Fisheries) for marine and anadromous species.

### **1.3.2.3 Clean Water Act**

The Clean Water Act (CWA) of 1972 is the primary federal law governing water pollution. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The act supports establishment and enforcement of water quality standards.

### **1.3.2.4 National Historic Preservation Act**

Section 106 of the National Historic Preservation Act (NHPA) of 1966 requires federal agencies to consider the effects of their proposals on historic properties and to provide state historic preservation officers, tribal historic preservation officers, and, as necessary, the Advisory Council on Historic Preservation a reasonable opportunity to review and comment on these actions. Section 106 review and NEPA are two separate, distinct processes. They can occur simultaneously, and documents can be combined. The information and mitigation gathered as part of the Section 106 review must be included in the NEPA document and the Section 106 process must be completed before a Finding of No Significant Impact (FONSI) or a Record of Decision (ROD) can be signed on a proposal that affects historic properties.

### **1.3.2.5 Architectural Barriers Act**

As outlined in the NPS Management Policies (2006), the Architectural Barriers Act Accessibility Standards (ABAAS) requires that buildings and facilities covered by the law must meet standards for accessibility by disabled persons. Such access would be provided consistent with preserving park resources and providing visitor safety and high-quality visitor experience.

## 1.4 PUBLIC INVOLVEMENT

Civic engagement is a continuous, dynamic conversation with the public on many levels that reinforces public commitment to preserving heritage resources, both cultural and natural.

The EA will be available for a 30-day public comment period. The public comment period will be announced by press release, posts on the NPS Planning, Environment, and Public Comment (PEPC) website, and by electronic mail sent to the Park mailing list. Agencies and tribes also will be notified by letter. Hardcopies of the EA will be available for review at Park headquarters. During this time, the public can provide feedback and questions online at <https://parkingplanning.gov/minersfalls> or mail comments to David Horne, Superintendent, Pictured Rocks National Lakeshore, PO Box 40, Munising, MI 49862. After the close of the public comment period, all public comments will be reviewed and analyzed prior to the release of a NPS decision document.

## 1.5 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.

The NPS identified specific issues and concerns related to implementing the range of alternatives analyzed in this EA (described in Chapter 2). Those issues retained for detailed analysis are included in the impact topics that are discussed in Chapter 3. NPS organizes the discussion of the affected environment and environmental consequences by “impact topics,” which are headings that represent the affected resources associated with the issues discussed during NPS and stakeholder coordination. Issues and impact topics that were considered but not carried forward for detailed analysis can be found in **Appendix A**. Topics were dismissed from further detailed analysis if it was determined that 1) the potential environmental impacts to resources or values would not be substantial; 2) the impacts were not central to the decision; or 3) a detailed analysis of these impacts was not necessary to make a reasoned choice between alternatives.

### 1.5.1 Impact Topics Dismissed from Further Detailed Analysis

Impact topics not carried forward for detailed analysis and described in **Appendix A** include:

- Archeological Resources; and
- Paleontological Resources.

## 2 ALTERNATIVES

The Council on Environmental Quality (CEQ) and implementing regulations for NEPA provide guidance on the consideration of alternatives in an EA. These regulations require the decision-maker (NPS) to consider the environmental effects of the proposed action and a range of alternatives, including the no-action alternative. Three alternatives were considered and are carried forward for analysis in this EA: the no action alternative and two action alternatives. A no action alternative is required by NEPA as a baseline to compare proposed action alternatives. The action alternatives present a reasonable and feasible approach that meets the purpose and need for action. This section also identifies the NPS preferred alternative (Alternative 1).

### 2.1 NO-ACTION ALTERNATIVE: NO IMPROVEMENTS

Under the No-Action Alternative, the NPS would maintain the staircase and viewing platforms in their current conditions except for routine maintenance (see **Figure 4**). No improvements would be made, and the structures would not be changed. As a result, further deterioration of the infrastructure would continue. Due to safety concerns, the area would ultimately need to be closed and the hazardous stair and overlook structures removed. Closure of the area would impact the public by removing access to a popular natural feature within the Park. Even with a closure, it is likely the public would continue to access the area by forging undesignated trails, which would further deteriorate the sensitive slope down to the river.

### 2.2 ALTERNATIVE 1: EXTEND STEPS AND CONSTRUCT TRAIL TO BOTTOM OF RAVINE (PROPOSED ACTION/PREFERRED ALTERNATIVE)

Under Alternative 1 (Preferred Alternative), the upper and lower platforms and staircase would be replaced, and the lower viewing platform extended further into the ravine to approximately the midpoint of the ravine's depth. The new upper platform would be replaced in the existing location and expanded to an approximate 25-foot by 25-foot footprint to improve visitor experience. The new lower viewing platform would be built in an adjacent location where a different lower viewing platform was previously constructed (see **Figure 5**). Moving the lower platform would preserve the current visitor experience in viewing the waterfall from a vantage point part way down the ravine. This extension would additionally improve the visitor experience by extending further down to a lower elevation within the ravine to experience the waterfall with the rock faces of the ravine walls which have been shaped over the years by the forces of water and ice produced by the Miners River and Falls with a better panoramic perspective than the current platform at the higher elevation reveals. The staircase leading from the trail to the lower platform would be replaced in approximately the same footprint as the existing staircase and end where the foundation remnants of the previous structure had existed. A new rustic-style trail on grade would be constructed from the new lower viewing platform and extended to the valley floor. The rustic trail would have



greater slope stability and usability by visitors. By including this singular defined trail passage to the bottom of the ravine, it is expected to stabilize impacts to the slope by reducing the instances of visitors forging their own routes down to the bottom of the ravine.

The new upper and lower platforms and staircase are currently constructed of treated lumber and timber with posts directly buried into the ground. The new platform and staircase would be replaced with similar lumber and timber materials. Final material selections would prioritize durability and efficiencies in positioning, constructing, and maintaining the structures. While wood lumber and timber would be the probable primary construction materials, consideration of synthetic composite materials (plastics or concrete lumber available within the construction industry market) may be evaluated during design. Structural foundation systems would also be evaluated for durability and construction efficiencies and may consist of direct buried posts into the soil, concrete piers, or metal helical driven piles. With the steep slope of the ravine, limited use of mechanical equipment is expected with significant portions of work being constructed by hand-held tools and manual efforts. Construction is expected to be conducted by hired contractors with experience in work within remote locations through a competitive bidding process. Duration of removal and construction is expected to occur within a single construction season (May-October).

Modifications to the staircase would be in the form of new materials, added visitor amenities such as benches, and increased resiliency of the structure. The stair structure would be constructed within the Architectural Barriers Act Accessibility Standards (ABAAS) to the greatest extent reasonably possible. The stair structure and viewing platforms would be sized to the reasonable minimum dimensions compliant with ABAAS to accommodate typical visitation.

The new rustic-style trail would start where the staircase meets the lower platform and extend down to the bottom of the ravine. Materials may include compacted soils, stone slab or tree log/timber backcountry steps, and/or aggregate trail tread built into the side of the ravine. The rustic-style trail is not intended to be constructed within ABAAS due to anticipated topographic conditions. The rustic-style trail however is intended to be a more visually acceptable impact to the viewshed as well as provide a varied degree of difficulty for visitors desiring a limited backcountry type experience.

Select vegetation and trees would be removed to enhance the viewshed of the waterfall from the upper and lower viewing platforms. Criteria for determining select tree removal would prioritize taking dead or dying hazard trees which may have a risk to visitor safety, reducing visual obstruction of the waterfall from the upper platform, and age or dominance of common species, preferring removal of younger specimens of the dominant species present.

Construction disturbance would occur within a maximum 40-foot buffer area beyond the footprint of the staircase and viewing platforms. The entirety of this area is not anticipated to be utilized for active construction activities with ground disturbance. Disturbance within the buffer is defined as the ability to physically construct the staircase, platforms by temporarily setting, preparing, or maneuvering materials out of or into place, positioning tools and limited equipment, and general worker circulation within the allowable work area. This defined buffer area does not allow

wholesale tree and understory vegetation removal. Remaining within a reasonably limited footprint which still allows the work to take place would be a priority.

Construction of the rustic-type trail would also prioritize containing the work to the smallest footprint reasonably possible up to a limited 40-foot buffer area centered on the designed alignment of the trail from the lower platform to bottom of ravine. Alignment of the trail would be determined based on topography, slope stability, and potentially incorporate route(s) formed by visitor's past usage. Construction would look to maximize hand work and hand tools to the greatest extent reasonably possible. Use of large construction equipment is expected to be limited or even improbable due to topographic and remote site conditions. Limited excavation may be required in order to 'bench' (form steps into the grade) the slope to achieve a stabilized alignment in which to place aggregate, stone, or tree/timber materials. This work would be accomplished by predominantly shovel and hand work. Construction contractors with experience in this type of remote trail work are anticipated to be able to accomplish the work at a similar pace as constructing the staircase and platform structures and is anticipated to be completed within a single construction season.

These 40-foot buffer areas, the Miners Falls Trail and the parking lot at the trailhead, would be used to accommodate staging for construction materials and equipment. The parking lot and trail would be closed during construction and the public notified of the closure on the Park's website.

## **2.3 ALTERNATIVE 2: EXTEND STEPS TO BOTTOM OF RAVINE**

Similarly to Alternative 1, the upper and lower platforms and staircase would be replaced, and the lower viewing platform extended further into the ravine. The new upper platform would be constructed in the existing location under the same criteria as Alternative 1 and expanded up to a 25-foot by 25-foot footprint to improve visitor experience. The new lower viewing platform would be built in an adjacent location where a different lower viewing platform was previously constructed (see **Figure 6**). The staircase leading from the trail to the lower platform would be replaced in approximately the same footprint as the existing staircase, as it is under Alternative 1.

Replacement of the upper and lower viewing platforms and staircase would occur in approximately the same location as Alternative 1. The greatest difference from Alternative 1 is that an additional new staircase would be constructed from the new lower viewing platform to the valley floor and end at a landing. No rustic trail would be constructed under this alternative as the entire route down the ravine to the bottom would be by constructed staircase, platform, and landings. The alignment of the new staircase to the bottom of the ravine under this alternative and the rustic trail under Alternative 1 are anticipated to have different alignments due to topography.

The new platform and stair structures would be replaced with similar lumber and timber type materials. Final material selections would prioritize durability, efficiencies in positioning, constructing, and maintaining the structures. While wood lumber and timber would be the probable primary construction materials, consideration of synthetic composite materials, such as

plastics or concrete lumber available within the construction industry market, may be evaluated during design. Structural foundation systems would also be evaluated for durability and construction efficiencies and may consist of direct buried posts into the soil, concrete piers, or metal helical driven piles. With the steep slope of the ravine, limited use of mechanical equipment is expected with significant portions of work being constructed by hand-held tools and manual efforts. Construction is expected to be conducted by hired contractors with experience working within remote locations through a competitive bidding process. Duration of removal and construction activities are expected to be completed within a single construction season (May-October).

Modifications to the staircase would be in the form of new materials, added visitor amenities such as benches, and increased resiliency of the structure. The stair structure would be constructed within ABAAS to the greatest extent reasonably possible. The stair structure and viewing platforms would be sized to the reasonable minimum dimensions compliant with ABAAS to accommodate typical visitation. Construction of a new staircase would extend into the ravine and end at the valley floor.

Select vegetation and trees would be removed to enhance the viewshed of the waterfall from the upper and lower viewing platforms. Criteria for selecting select tree removal would prioritize taking dead or dying hazard trees which may have risk to visitor safety, reducing visual obstruction of the waterfall from the upper platform, and age or dominance of common species, preferring removal of younger specimens of the dominant species present.

Construction disturbance for the viewing platforms and stair replacement would occur within a maximum 40-foot buffer area beyond the footprint of the staircase, viewing platform, and existing Miners Falls Trail coming from the parking lot. The entirety of this area is not anticipated to be utilized for active construction activities with ground disturbance. Disturbance within the buffer is defined as the ability to physically construct the staircases and platforms by temporarily setting, preparing, or maneuvering materials out of or into place, positioning tools and limited equipment, and general worker circulation within the allowable work area. This defined buffer area does not allow wholesale tree and understory vegetation removal. Remaining within a reasonably limited footprint which allows the work to take place would be a priority.

These 40-foot buffer areas, the existing preceding trail, and the parking lot at the trailhead would be used to accommodate staging for construction materials and equipment. The parking lot and trail would be closed during construction and the public notified of the closure on the Park's website.

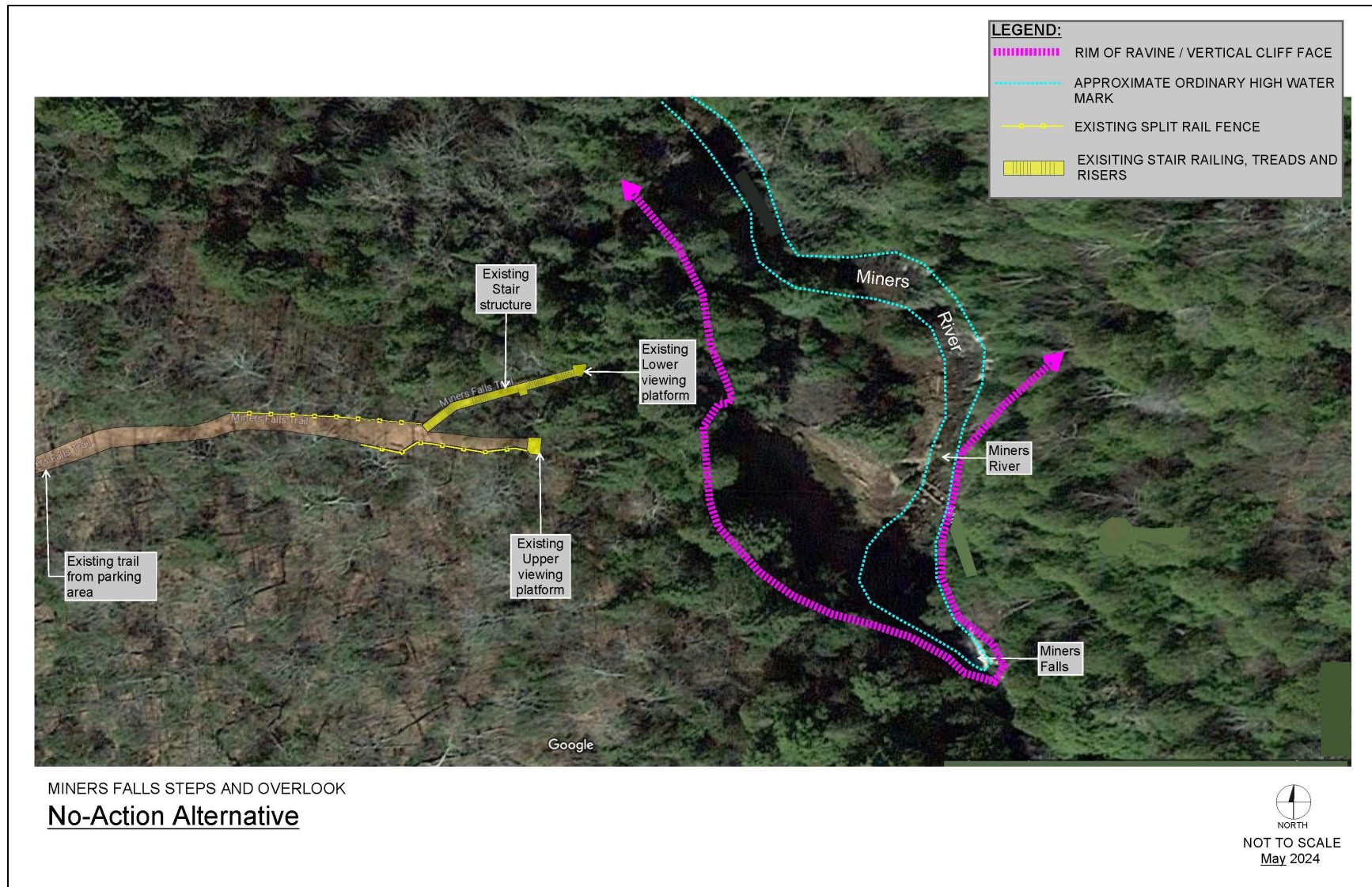
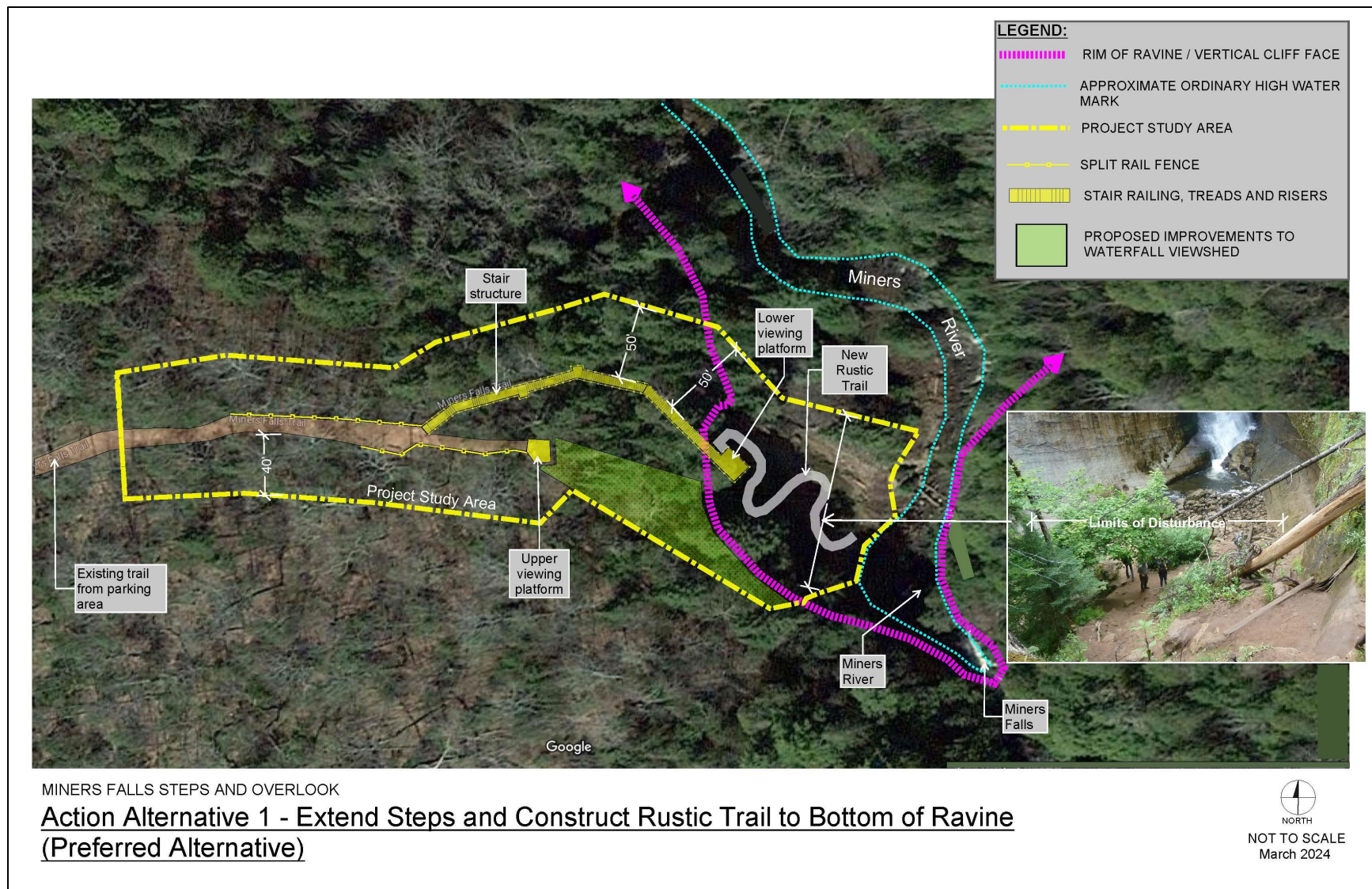


Figure 4. No-Action Alternative





**Figure 5. Action Alternative 1 - Extend Steps and Construct Rustic Trail to Bottom of Ravine (Preferred Alternative)**



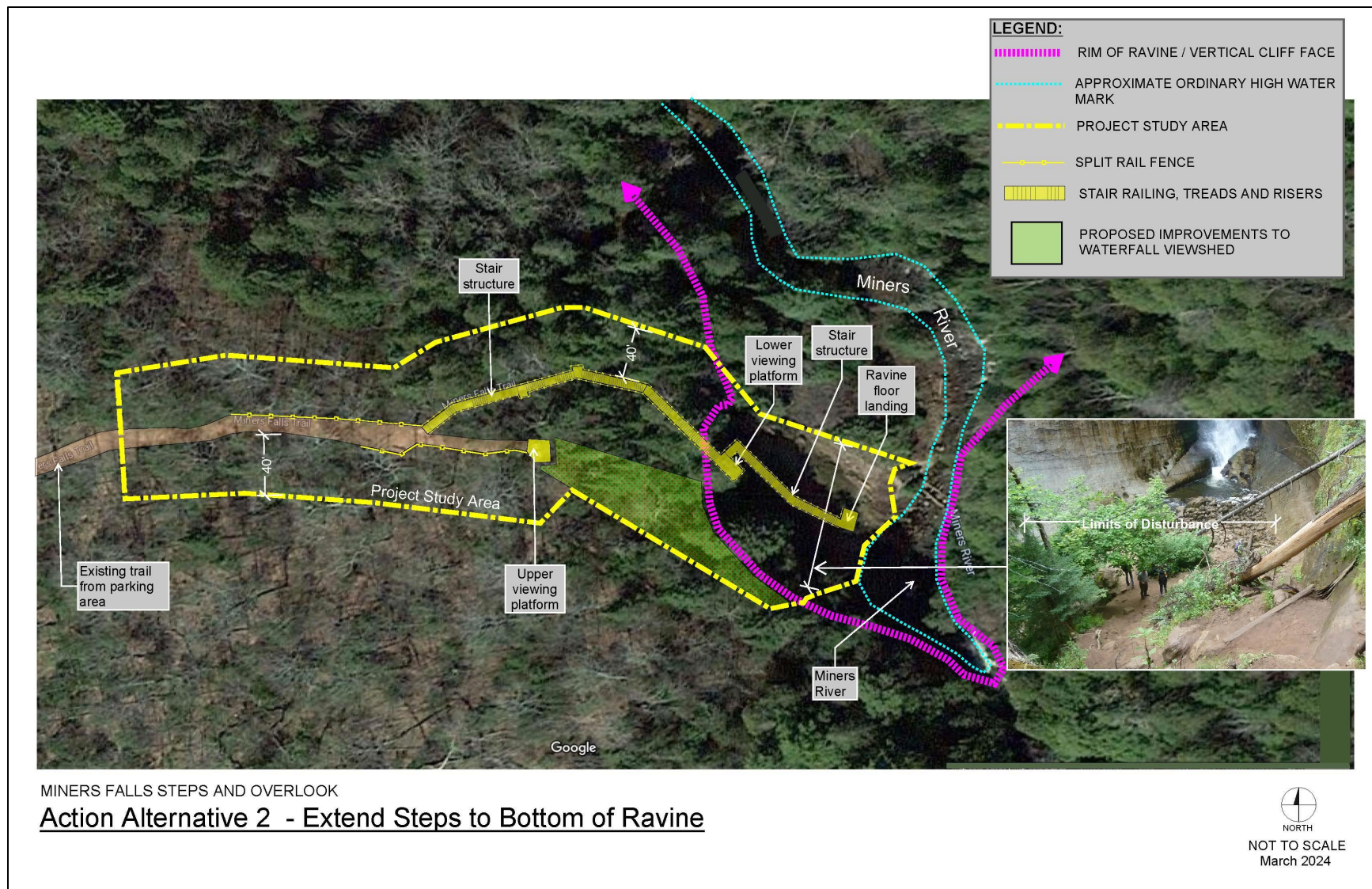


Figure 6. Action Alternative 2 - Extend Steps to Bottom of Ravine

### **2.3.1 Stipulations and Mitigations**

The following mitigation measures and best management practices would be applied to avoid or minimize potential impacts from implementation of Alternative 1, the proposed action/preferred alternative.

### **2.3.2 Cultural Resource Protection**

- In accordance with the 2008 National Park Service Programmatic Agreement Section VI, if cultural resources are discovered during project implementation all work in that area must stop and the Superintendent, Chief of Cultural Resources, and Park Archeologist must be notified immediately.
- If items protected by the Native American Graves Protection and Repatriation Act (NAGPRA) are discovered during project implementation, all activity must cease in the area of discovery and immediate notice made to the Superintendent and Chief of Cultural Resources. The Superintendent or Chief of Cultural Resources will notify the appropriate Federally recognized Indian Tribes/Organizations and State Historic Preservation Officer (SHPO).

### **2.3.3 Geological Resource Protection**

- Project activities would consider the site topography and utilize to the extent practicable areas with low topographic relief and previously disturbed areas to avoid excessive erosion and damage to resources.
- Stabilization and erosion prevention measures would be utilized during construction.
- Any sensitive geological formations or resources would be avoided to the extent practicable during and after construction.

### **2.3.4 Human Health and Safety**

- Portions of the trail would be closed to visitors where active construction is taking place or anywhere where construction activities may pose safety threats to visitors.
- Signage would be posted, and temporary barriers installed during construction to alert visitors that the trail is closed.
- New structures and trails would receive regular inspection and maintenance to ensure they are suitable for visitor use.

### **2.3.5 Vegetation Protection**

- When the project design is completed, natural resource surveys would be conducted prior to any clearing and removal of vegetation. The NPS would seek to minimize impacts to vegetation through context sensitive site design and using the previously disturbed footprints of existing facilities.
- Project activities would consider the site topography and utilize to the extent practicable areas with low topographic relief and previously disturbed areas to allow for plant propagation and to minimize future impacts to vegetation.
- Species surveys for any federally listed species under the Endangered Species Act would be conducted prior to any vegetation removal.
- In coordination with the NPS, any fill, mulch, reseeding, and sod material brought into the Park must be free of non-native, invasive plants and animals, and noxious weeds.
- Any equipment, including construction tools and vehicles, must be free of exotic or nonnative species to prevent introduction and spread onto the project site.
- Contractors would be required to use boot-brush stations at Park trailheads or designated areas to avoid spreading any non-native plants to other parts of the Park.
- Construction crews would be educated in how to spot invasive species and what to do should they be encountered.
- Construction and maintenance activities would be limited to specific times and locations to minimize impacts on ecologically sensitive areas.

### **2.3.6 Viewshed Protection**

- Development would mostly be limited to the existing disturbed footprint, and structures would only be elevated when necessary for flood resiliency.
- Any new materials for redevelopment would be sourced to be aesthetically consistent with the surrounding environment.

### **2.3.7 Water Quality and Aquatic Resources Protection**

- Signage would be added at the trailhead and along the trail to encourage visitors to stay on established trails and walkways to reduce erosion and prevent visitors from disturbing wetland areas.
- Interpretive signs could be added at the viewing platforms with information about aquatic resources and ways that visitors can minimize their impacts.
- If there are concerns about impacts to water quality and aquatic resources, surveys would be conducted to assess and monitor any changes due to increased visitor activity.
- A stormwater pollution prevention plan would be developed and approved by the NPS prior to construction and implemented during construction.



### **2.3.8 Wildlife and Threatened and Endangered Species Protection**

- Construction and maintenance activities would be limited to specific times and locations to minimize impacts to ecologically sensitive areas.
- Nesting and wildlife presence/absence surveys would be conducted to determine areas and seasons of avoidance.
- Noisy tools, such as chainsaws and chippers, would be operated in a manner that minimizes impacts on the soundscapes. Sound proofing of generators or other utilities would also be considered.
- Construction crews would be educated in how to spot invasive species and what to do should they be encountered.

## **2.4 ALTERNATIVES CONSIDERED BUT DISMISSED**

The following alternative was considered by the interdisciplinary team (IDT), but was not carried forward:

### **2.4.1 Replacement In-Kind**

During planning, the NPS evaluated another alternative to consider as part of this EA. This alternative included the in-kind replacement of infrastructure. Under this alternative, the existing infrastructure would be replaced with a similar structure that currently exists, however no visitor access to the Miners River or base of Miners Falls would be provided. This alternative was dismissed from further analysis in this EA because it would not meet the purpose and need of the project which is to provide safe visitor access to the Miners River and base of Miners Falls while reducing impacts to the natural environment. Without a constructed and defined route to the valley floor, visitors would likely continue to create their own trails. This would cause further instability and erosion of the steep hillslope, increase hazardous conditions in high use areas, and raise visitor safety concerns.

## 3 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

### 3.1 INTRODUCTIONS AND DEFINITIONS

This chapter describes the current and expected future conditions of the following impact topics: vegetation including threatened and endangered species; visitor use and experience and viewsheds; human health and safety; wildlife including threatened and endangered species; geological resources; and water quality and aquatic resources. These impact topics were identified through scoping as having the potential to be affected by the implementation of the alternatives described in Chapter 2. This chapter describes both the affected environment (the existing conditions of resources, including trends and planned actions) and environmental consequences (impacts of the No-Action Alternative and Alternatives 1 and 2) on each resource.

Additionally, this chapter analyzes the beneficial and adverse effects that would likely result from implementing any of the alternatives considered in this EA. These effects, including direct, indirect, and cumulative effects are described in the environmental consequences section for each impact topic. A factual description of the direct and indirect effects provides the reader with an understanding of how the current and expected future condition of the resource would likely change as a result of implementing the alternatives. A description of the cumulative effects provides the reader with an understanding of the effects of implementing the alternatives when added to other past, present, and reasonably foreseeable future actions.

Cumulative impacts are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions” (40 CFR 1508.7). Cumulative impacts can result from individually minor, but collectively significant, actions taking place over time. Past, present, and reasonably foreseeable future actions in the area that could affect resources in the Park are described in the cumulative impacts analysis under each impact topic in the following sections.

#### 3.1.1 Climate Related Trends

A key consideration in current planning efforts for infrastructure and Park management is climate change. The effects of rising water and air temperatures, changing precipitation patterns, increasing storm frequency and intensity, rising sea level, and other climatic changes are evident in the NPS. The NPS recognizes the importance of addressing the effects of current and future climate change in its planning and, as such, this EA considers the effects of climate change in its analysis.

Climate change could have a range of effects on the project area. The Great Lakes region is experiencing changes in climate including a reduction in winter ice, increased water and air temperatures, and changes in precipitation patterns. Climatic conditions in the area are already

changing and shifting beyond historical ranges (NPS 2014). These changes have substantial effects on the resources and ecosystems within the region and would likely affect all aspects of Park management, including cultural and natural resource protection, visitor experience, and Park operations. Vegetation and wildlife could be impacted in the Park by climatic changes and species ranges are expected to shift as temperatures warm. This could introduce new species into the project area including invasive species from outside the Great Lakes further threatening the livelihood of native species (A. Schramm 2010).

As water and air temperatures rise, the duration of lake ice cover is decreasing which is contributing to increased precipitation, both snow and rain. Earlier spring conditions and ice melt could change the timing of stream flows in the Park and increased occurrences of heavy rainstorms may cause more frequent flooding. Conditions are expected to become drier overall, however, with increased extreme precipitation events river flooding is becoming more common causing erosion to areas along waterways (Kling 2005). The NPS anticipates that without this project, increased precipitation would exacerbate the erosion of the hillside where the unauthorized trails have formed.

Warming temperatures are also anticipated to result in increased visitation to the Park (NPS 2015b). Increased visitation along with effects from climate change may increase impacts in certain areas of the Park that are more susceptible to these pressures. Combined effects of extreme precipitation events, flooding, and foot traffic, especially in areas off-trail, could result in higher rates of erosion and have negative impacts on natural resources in the Park.

## 3.2 VEGETATION INCLUDING THREATENED AND ENDANGERED SPECIES

### 3.2.1 Affected Environment

Many wildflowers can be found in the project area including, but not limited to, trillium (*Trillium grandiflorum*), false Solomon's seal (*Maianthemum racemosum*), downy yellow (*Aureolaria virginica*) and Canada violets (*Viola canadensis*), and wild sarsaparilla (*Aralia nudicaulis*) (NPS 2019). Non-native flowers found within the Park include baby's breath (*Gypsophila paniculata*), forget-me-nots (*Myosotis spp.*), ox-eye daisy (*Gypsophila paniculata*), orange hawkweed (*Orange hawkweed*), and St. John's wort (*Hypericum perforatum*). Tree species found in the study area include American beech (*Fagus grandifolia*), sugar maple (*Acer saccharum*), red maple (*Acer rubrum*), yellow birch (*Betula alleghaniensis*), eastern hemlock (*Tsuga canadensis*), and white pine (*Pinus strobus*). Black spruce (*Picea mariana*), white spruce (*Picea glauca*), white cedar (*Thuja occidentalis*), and larch (tamarack) (*Larix laricina*) can be found closer to the riverbank. In addition, approximately 1 acre of palustrine wetland with wetland-obligate vegetation exists 100-150 feet south of the study area outside of the anticipated limits of disturbance for the project (Tsang 2022).

The federally Threatened Pitcher's thistle is present within the Park; however, it is unlikely to be found within the Project Area because it is a dune habitat species (USFWS May 22, 2024) (USFWS 2002). Per USFWS, "Pitcher's thistle is endemic to the unforested dune systems of the western



Great Lakes and requires active sand dune processes to maintain its early successional habitat,” (USFWS 2002).

Invasive species have become a threat to native flora and fauna. At the Park, the beech bark scale insect (*Cryptococcus fagisuga*) and fungal infection (*Neonectria faginata*, *Neonectria ditissima*, and *Bionectria ochroleuca*) that causes Beech Bark Disease is killing most of the mature beech trees in the park (NPS 2022). The loss of beech as an important component of the forest canopy would affect many species of wildlife and the forest community. Other harmful invasive insects include the emerald ash borer (*Agrilus planipennis*) and spongy moth (formerly gypsy moth) (*Lymantria dispar dispar*).

### 3.2.2 Environmental Consequences

**Methodology.** Information to assess impacts was sourced from Park-related websites, the Park’s 2022 wetland survey, and the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool. Impacts to federally threatened species and other flora were considered as part of this evaluation.

#### 3.2.2.1 No-Action Alternative: No Improvements

Under the No-Action Alternative, the NPS would perform routine operation and maintenance on the existing structures, and the existing infrastructure would remain in place. Non-native plants often establish in disturbed soils like those along roadsides and areas of human activity, such as trails and construction sites (NPS 2019). Erosion also occurs in areas of sparse vegetation, such as the unauthorized trail routes to the river created by the public. By not improving the existing infrastructure, public use of the unauthorized trail would continue to exacerbate erosion and prevent native vegetation from growing within the trail.

**Cumulative Impacts.** The No-Action Alternative and reasonably foreseeable future activities would allow for continued impacts to vegetation, as species cannot grow on the unauthorized trail to the river due to constant trampling by visitors. Erosion would also continue to be exacerbated by the continued use of the unauthorized trail created by the public.

#### 3.2.2.2 Alternative 1: Extend Steps and Construct Rustic Trail to Bottom of Ravine (Proposed Action/Preferred Alternative)

By providing additional viewing opportunities and a designated marked trail down to the bottom of the ravine, visitors would be less likely to go off-trail and trample native vegetation or potentially spread non-native vegetation. Construction can cause damage to native vegetation if equipment and personnel move off the existing trail. If construction crews and equipment spread non-native vegetation, this would result in permanent impacts to native vegetation. One or more trees and/or shrubs may need to be removed to safely install the new staircase, viewing platforms, and rustic trail. Vegetation would not be replanted resulting in permanent vegetation loss.

See section 2.3.5 Vegetation Protection for a complete list of mitigation measures and stipulations to reduce the spread of invasive species and negative impacts to native vegetation under Alternative 1.

**Cumulative Impacts.** Alternative 1 and reasonably foreseeable future activities would reduce vegetation and erosion impacts by replacing the unauthorized trail to the river with a designated, more stable trail down the ravine to the valley floor. However, this new trail would result in permanent removal of vegetation. Other projects may occur within the park around the same time as the project proposed in this EA. The planned Miners River bridge replacement project would cause temporary impacts to vegetation during construction but would not result in negative long-term impacts. The planned alignment and re-routing of Miners Falls Trail, which is the existing trail connecting the parking area to the proposed project site under Alternative 1, would have permanent impacts to vegetation on the fringe of the Miners Falls Trail as re-routing would require the removal of vegetation. The NPS will make reasonable efforts to preserve as much vegetation as possible to avoid negative cumulative impacts.

### 3.2.2.3 Alternative 2: Extend Steps to Bottom of Ravine

By installing infrastructure adjacent to the river, temporary negative impacts to vegetation would occur during construction; however, there would be long-term benefits to vegetation by covering the unauthorized visitor-created trail. Covering the unauthorized trail with steps to the base of the ravine would result in a positive impact by removing the source of erosion (e.g., the unauthorized dirt trail), which would protect vegetation. Without frequent foot traffic by visitors, vegetation would regrow in the area under the staircase.

Construction can cause damage to native vegetation if equipment and personnel move off the existing trail. If construction crews and equipment spread non-native vegetation, this would result in permanent impacts to native vegetation. One or more trees and/or shrubs may need to be removed to safely install the new staircases and viewing platforms. Vegetation would not be replanted resulting in a permanent vegetation loss.

**Cumulative Impacts.** Alternative 2 and reasonably foreseeable future activities would reduce vegetation and erosion impacts by replacing the unauthorized trail to the river with a formal, more stable staircase down the ravine. The future actions of the Miners River bridge replacement would have a temporary negative impact on vegetation during construction of the bridge replacement but would not result in negative long-term impacts. The planned alignment and re-routing of Miners Falls Trail, which is the existing trail connecting the parking area to the proposed project site under Alternative 1, would have permanent impacts to vegetation on the fringe of the Miners Falls Trail as re-routing would require the removal of vegetation. The NPS will make reasonable efforts to preserve as much vegetation as possible to avoid negative cumulative impacts.

### 3.2.2.4 Conclusion

The No-Action Alternative would not meet the purpose and need of the project as this alternative would allow for continued erosion and potential damage to vegetation stemming from public use of unauthorized trails. When compared to the No-Action Alternative, Alternative 1 and 2 would better

support the NPS's goal of natural resource management while providing safe visitor access to the river. Alternative 1 and 2 would seek to discontinue use of the unauthorized trail with a designated rustic trail (Alternative 1) or additional staircase (Alternative 2) and replace the existing deteriorating steps and viewing platform. Both action alternatives would reduce the effects of erosion and the risk of spreading non-native vegetation by providing a designated route to the bottom of the ravine. However, providing a designated route to the bottom of the ravine does not reduce the risk of spreading non-native vegetation once a visitor is at the bottom. Without a designated route to the ravine bottom, the unauthorized trails would persist, making either Alternative 1 or Alternative 2 more in alignment with the purpose and need.

### **3.3 VISITOR USE AND EXPERIENCE AND VIEWSHEDS**

#### **3.3.1 Affected Environment**

The Park consists of miles of beaches, hiking trails, waterfalls, sand dunes, lakes and streams, and forests for public use and enjoyment. Specifically, the 42-mile lakeshore includes approximately 15 miles of cliffs, 10 inland lakes, 100 miles of trails, and 22 backcountry campgrounds. The Park is open year-round and is a four-season recreation destination with hiking, canoeing, kayaking, sightseeing, birding, swimming, backcountry and drive-in camping, winter ice climbing, ice fishing, cross-country skiing, and other activities. Hikers can gain access to the beach from several trails. The Miners River drops about 50 feet over a sandstone outcrop, creating Miners Falls, the Park's most powerful waterfall. The Miners Falls Trail is a 1.2-mile hike that ends at a viewing platform at Miners Falls. The viewing platform is the terminus of the Miners Falls Trail which promotes visitor experiences including natural sounds, nature viewing providing visitor access to natural resources, and appreciation of natural erosion processes. Currently, visitors are bypassing the platform and walking down the terrain to gain a better view of the river and the falls. The current viewshed from the platforms includes the waterfall, sandstone outcrop and vegetation.

Visitation at the Park has generally been increasing over the last 10 years (NPS 2024). In 2019, the total number of visitors to the Park was 858,715, increasing to 1,313,179 in 2021 (NPS 2024). While visitation has fluctuated over the years, the trend of highest visitation during July and August remains constant. Additionally, visitation is expected to continue to increase as temperatures warm due to climate change (NPS 2015b).

#### **3.3.2 Environmental Consequences**

**Methodology.** When assessing impacts on visitor use and experience and viewsheds, the NPS used the professional judgement of the NPS staff. Visitor use and experience and viewsheds were assessed in terms of historical and anticipated use, site access, recreational opportunity, and access to information and interpretation.



### 3.3.2.1 No-Action Alternative: No Improvements

Under the No-Action Alternative, the NPS would perform routine operation and maintenance on the existing structures. The existing infrastructure would remain in place, and thus would not address concerns of the deteriorating conditions of the current viewing platform. Visitors would likely continue to pass the platform and use unauthorized trails down the valley which causes further erosion and hazards associated with visitors traveling down to the valley. As more visitors travel off-trail, the area would become more susceptible to erosion, and vegetation would be impacted, creating a less enjoyable environment for visitors. The viewshed from Miners Falls trail and its associated viewing platforms would remain unchanged.

**Cumulative Impacts.** The impacts of present and reasonably foreseeable planned actions when combined with the No-Action Alternative would have impacts on visitor use and experience. The future actions of the Miners Falls Trail alignment adjustments and the Miners Rivers bridge replacement would have a long-term beneficial impact on visitor use and experience by improving accessibility along the trail and access to and from the Miners Falls Trail from the bridge replacement. Viewsheds would not be impacted by these future actions. The No-Action Alternative would not positively contribute to visitor use and experience.

### 3.3.2.2 Alternative 1: Extend Steps and Construct Rustic Trail to Bottom of Ravine (Proposed Action/Preferred Alternative)

Under Alternative 1, the NPS would aim to benefit visitors by replacing the existing infrastructure and providing formal, authorized access to the ravine bottom, thereby providing a more enjoyable experience. The new lower viewing platform would be larger and located further into the ravine to improve visitor experience and accessibility. Select vegetation and trees would be removed within the viewshed from the upper deck viewing platform of the waterfall which would enhance views. Alternative 1 also provides a natural rustic trail from the lower viewing platform to the valley floor which would decrease erosion and allow for restoration of the area that has been damaged by public use of visitor-created trails. This would create a designated, more natural and aesthetically pleasing trail for visitors to reach the river and waterfall. The rustic trail would additionally provide a diversity of trail experience by its backcountry character. This backcountry rustic character would benefit the viewshed by blending its natural materials into the surrounding landscape greater than a wood and timber constructed staircase into the lower reaches of the ravine.

During construction, there would be short-term disruptions to visitors because the trail would be closed temporarily while structures are being replaced and a new rustic trail is constructed. Full closure of the parking lot would also be required to accommodate staging of equipment and materials. Once construction is complete, visitor use, and experience would be enhanced in the long-term with new structures and access to a new extended trail to the bottom of the valley floor. The select vegetation clearing would provide a better viewshed of the Miners River and Miners Falls from the upper viewing platform. Mitigation measures would be implemented regarding development limited to the existing disturbed footprint and the use of materials would be sourced to be aesthetically consistent with the surrounding environment.

See section 2.3.6 Viewshed Protection for a complete list of mitigation measures and stipulations to improve viewshed protection and visitor experience under Alternative 1.

**Cumulative Impacts.** The impacts of present and reasonably foreseeable planned actions when combined with Alternative 1 would have temporary negative and long-term beneficial impacts on visitor use and experience and viewsheds. The future actions of the Miners Falls Trail alignment adjustments and the Miners Rivers bridge replacement would have a long-term beneficial impact on visitor use and experience by improving accessibility along the trail and access to and from the Miners Falls Trail from the bridge replacement. Other projects may occur within the park around the same time as the project proposed in this EA. Alternative 1 would contribute by replacing the existing infrastructure and extending the trail to enhance access and visitor use as well as experience and viewsheds. Overall, there would be long-term beneficial cumulative impacts with Alternative 1 contributing a noticeable impact to visitor experience and viewsheds.

### 3.3.2.3 Alternative 2: Extend Steps to Bottom of Ravine

Under Alternative 2, the NPS would aim to benefit visitors by replacing the existing infrastructure, providing access to the valley floor, and providing a more enjoyable experience. The new lower viewing platform would be of the same size and location as Alternative 1 to sustain visitor experience with enhancement of that experience by extending to a lower vantage point within the ravine. Select vegetation and trees would be removed within the viewshed of the waterfall from the upper viewing platform to enhance the viewshed of the waterfall. Alternative 2 extends a constructed staircase from the lower viewing platform to the ravine bottom, which would decrease erosion and allow for restoration of the area that has been damaged by public use of unauthorized trails. This would provide a more streamlined, safe, and enjoyable experience for visitors that are wanting to go all the way to the river.

During construction, there would be short-term disruptions to visitors because the trail, or portions of the trail, may be closed temporarily while structures are being replaced and the staircase leading down to the valley floor are being built. Similar to Alternative 1, full closure of the parking lot would be required to accommodate staging of equipment and materials which would limit how many visitors can access the trail during construction. However, once construction is complete, visitor use, and experience would be enhanced in the long-term with new structures and an additional viewshed of the Miners River and Miners Falls. Additionally, visitors would have a staircase to access the valley floor eliminating concerns associated with visitors accessing the valley floor on unauthorized trails.

**Cumulative Impacts.** The impacts of present and reasonably foreseeable planned actions when combined with Alternative 2 would have temporary negative and long-term beneficial impacts on visitor use and experience and viewsheds. The future actions of the Miners Falls Trail alignment adjustments and the Miners Rivers bridge replacement would have a long-term beneficial impact on visitor use and experience by improving accessibility along the trail and access to and from the Miners Falls Trail from the bridge replacement. Alternative 2 would contribute to these effects by replacing the existing infrastructure and extending the staircase to enhance access and visitor use as well as experience and viewsheds. However, the additional infrastructure required for the

staircase may have an adverse impact to viewsheds beyond the lower platform into the lower reaches of the ravine to the bottom. Overall, there would be long-term beneficial cumulative impacts with Alternative 2 contributing a noticeable impact to visitor experience and viewsheds.

#### **3.3.2.4 Conclusion**

Both Alternative 1 and Alternative 2 would improve visitor use and experience and enhance the viewshed; however, some visitors may feel that accessing the valley via a staircase over a rustic trail may be less authentic while enjoying the natural resources. Additionally, more vegetation may need to be removed to build the staircase or would be covered by the staircase creating a less aesthetically pleasing environment for visitors. As such, Alternative 1 has been identified as the preferred alternative because it would replace existing infrastructure, extend the viewing platform and staircase to the bottom of the ravine, and provide access to the river and base of the waterfall in a more rustic manner. Alternative 1 would significantly reduce the public use of unauthorized visitor-created trails by redistributing foot traffic to an official trail designed to limit erosion. It would provide a route to the ravine bottom by blending its natural materials into the surrounding landscape greater than a wood and timber constructed stair into the lower reaches of the ravine., as proposed under Alternative 2. The No-Action Alternative is not preferred, as performing routine maintenance on existing infrastructure would not provide safe access to the valley floor.

### **3.4 HUMAN HEALTH AND SAFETY**

#### **3.4.1 Affected Environment**

The NPS *Management Policies* (NPS 2006) state that the NPS is committed to providing appropriate, high-quality opportunities for visitors to enjoy the parks. The policies also state, "While recognizing that there are limitations on its capability to totally eliminate all hazards, the National Park Service and its concessioners, contractors, and cooperators would seek to provide a safe and healthful environment for visitors and employees" (sec. 8.2.5.1). Further, the NPS would strive to protect human life and provide for injury-free visits (sec. 8.2.5).

The Park presents many potential hazards and risks to visitors and employees; therefore, safety is an important concern. The NPS strives to ensure that visitors are aware of the risks of recreating within the Park. Human behavior has created several social trail routes within the Park, including at Miners Falls Trail. The voluntary, unauthorized social trails in the project area have created instability of the vegetated hillslope, caused erosion issues, and an increased risk to safety for visitors and Park staff. Due to the steep and remote nature of this location, the ability for Park responders to provide aid or rescue to the bottom of the valley in an emergency is difficult and creates further risk to safety. The steps and viewing platforms at Miners Fall Trail are progressively deteriorating due to age and location within a frequently damp forested area of limited sun exposure, which have caused potential safety concerns for the visiting public.

### 3.4.2 Environmental Consequences

**Methodology.** When assessing impacts on human health and safety, the NPS used the professional judgement of the NPS staff. Information to assess impacts was sourced from Park-related websites.

#### 3.4.2.1 No-Action Alternative: No Improvements

Under the No-Action Alternative, the NPS would perform routine operation and maintenance on the existing structures. Risks to human health and safety would remain or worsen. The existing infrastructure would be left in place and maintained, which would not fully address safety concerns of the deteriorating conditions of the current viewing platform. However, visitors would likely continue to pass the platform and use unauthorized trails down the ravine, which poses its own safety concerns and makes rescue operations from the river challenging. By only performing routine maintenance on the structures, the trail, or portions of the trail, may need to be closed in the future if more significant deterioration occurs. Leaving the existing structures in place could result in negative impacts to human health and safety by not mitigating the hazards currently at the trail.

**Cumulative Impacts.** The impacts of present and reasonably foreseeable planned actions when combined with the No-Action Alternative would have impacts to human health and safety. The future actions of re-routing the Miners Falls Trail and the Miners Rivers bridge replacement would have a long-term beneficial impact by improving safety and accessibility along the trail as well as provide safe passage from the bridge replacement. The No-Action Alternative would not contribute by maintaining the existing infrastructure that has become hazardous for visitors and Park staff. Overall, there would be negative impacts, with the No-Action Alternative contributing a noticeable impact to human health and safety.

#### 3.4.2.2 Alternative 1: Extend Steps and Construct Rustic Trail to Bottom of Ravine (Proposed Action/Preferred Alternative)

Under Alternative 1, the NPS would aim to improve human health and safety by replacing the existing infrastructure and establishing an official trail into the ravine bottom to address safety concerns. The rustic trail would encourage more visitors to hike all the way down to the ravine bottom by a singular stabilized route. Increased traffic down by the water in current conditions may result in slips, trips, and falls in and around the water and on rocks. Conditions in the valley may be dangerous during flooding events which would increase safety concerns for visitors hiking past the lower viewing platform on an undesignated trail. An established trail would make it easier for hikers that obtain injuries in the valley to hike out without the need for Park staff or search and rescue to assist. If a rescue is necessary, the trail would make rescue operations conducive with greater efficiency, putting Park staff at less risk for injury.

During construction, the trail or portions of the trail would be temporarily closed while structures are being replaced. Closure areas would include signage to alert visitors that the trail is closed. Areas would be delineated with temporary barriers to keep visitors out of the construction zone for safety. However, once construction is complete, there would be long-term beneficial impacts to human health and safety as the staircase and viewing platforms would be replaced, mitigating the



hazards currently present. Mitigation measures would be implemented regarding closures where active construction is taking place that may pose a safety threat to visitors (including posting signage) and inspection and maintenance activities post construction.

**Cumulative Impacts.** The impacts of present and reasonably foreseeable planned actions when combined with Alternative 1 would have beneficial impacts to human health and safety. The future actions of alignment adjustments to the Miners Falls Trail preceding this project area and the Miners Rivers bridge replacement would have a long-term beneficial impact by improving safety and accessibility along the trail as well as provide safe passage from the bridge replacement. Other projects may occur within the park around the same time as the project proposed in this EA. Alternative 1 would contribute by providing a safe and efficient trail down to the river and create a safer environment for rescue operations. There may be negative impacts on human health and safety if more visitors are hiking down to the river which has increased potential to cause a greater number of annual injuries; however, these impacts would be comparable to the current impacts since visitors have already been hiking down to the river on unauthorized trails. Overall, there would be long-term beneficial cumulative impacts with Alternative 1 contributing a noticeable impact to human health and safety.

#### **3.4.2.3 Alternative 2: Extend Steps to Bottom of Ravine**

Under Alternative 2, the NPS would aim to benefit human health and safety by replacing the existing infrastructure and establishing a staircase to the valley floor addressing safety concerns. In addition, the staircase structure would provide the most stable and direct route down to the ravine bottom. This would encourage more visitors to hike all the way down to the river. Increased traffic down by the water may result in slips, trips, and falls in and around the water and on rocks. Conditions in the valley may be dangerous during flooding events which would increase safety concerns for visitors hiking past the lower viewing platform. A staircase extending all the way to the valley floor would make it easier for hikers that obtain injuries to hike out without the need for Park staff or search and rescue to assist. If a rescue is necessary, the staircase would make rescue operations conducive with greater efficiency, putting Park staff at less risk for injury.

During construction, the trail, or portions of the trail, would be temporarily closed while structures are being replaced (similar to Alternative 1). Closure areas would include signage to alert visitors that the trail is closed. Areas would be delineated with temporary barriers to keep visitors out of the construction zone for safety. However, once construction is complete, there would be long-term beneficial impacts to human health and safety as the staircase and viewing platforms would be replaced mitigating the hazards currently at the trail.

**Cumulative Impacts.** The impacts of present and reasonably foreseeable planned actions when combined with Alternative 2 would have impacts to human health and safety. The future actions of re-routing the Miners Falls Trail and the Miners Rivers bridge replacement would have a long-term beneficial impact by improving safety and accessibility along the trail as well as provide safe passage from the bridge replacement. Alternative 2 would contribute by providing a safe route down to the river and create a safer environment for rescue operations with a new built staircase structure. There may be negative impacts on human health and safety if more visitors are hiking

down to the river which has increased potential to cause injuries; however, these impacts would be comparable to the current impacts since visitors have already been hiking down to the river on unauthorized trails. Overall, there would be long-term beneficial cumulative impacts with Alternative 2 contributing a noticeable impact to human health and safety.

#### 3.4.2.4 Conclusion

When compared to the No-Action Alternative, Alternative 1 and Alternative 2 both provide safer routes to the water for visitors and Park staff. Alternative 1 accomplishes this by a combination of stair and on-grade trail while Alternative 2 utilizes a constructed stair structure only. In the event of an emergency, both alternatives would provide greater ease for visitors and Park staff to navigate the slope of the ravine. The stair structure in Alternative 2 would provide a potentially better usability in the lower reach of the ravine than the Alternative 1 trail; however, both alternatives would accomplish the objective. Alternative 1 would provide a rustic, aesthetically pleasing trail without the additional infrastructure, which may reduce the adverse impact to viewsheds, and visitor use and experience than the presence of a constructed stair in the lower reach of the ravine in Alternative 2.

### 3.5 WILDLIFE INCLUDING THREATENED AND ENDANGERED SPECIES

#### 3.5.1 Affected Environment

The Park provides suitable habitat for several mammal species, including black bear (*Ursus americanus*), moose (*Alces alces*), marten (*Martes americana*), fisher (*Martes pennanti*), river otter (*Lontra canadensis*), beaver (*Castor canadensis*), chipmunk (*Tamias striatus*), and porcupine (*Erethizon dorsatum*). Six species of bats are known to occur in the Park, mostly during warmer months. They mostly spend winter in abandoned mines and caves of the western Upper Peninsula (NPS 2021b). More than 180 species of birds have been documented in the Park, including raptors such as peregrine falcons (*Falco peregrinus*), bald eagles (*Haliaeetus leucocephalus*), hawks, and owls; warblers; and shorebirds. While there is no designated critical habitat within the Park, there is piping plover (*Charadrius melodus*) critical habitat just east of the Park boundary. **Table 1** provides a list of federally threatened and endangered wildlife species that occur or are likely to occur in the Park as well as potential mitigation measures to minimize impacts and prevent incidental take.

**Table 1. Federally Listed Wildlife and Plant Species within the Park (USFWS May 22, 2024)**

| Species                               | Federal Status | Documented Within Park            | Conservation Measures                              |
|---------------------------------------|----------------|-----------------------------------|--|
| <b>Mammals</b>                        |                |                                   |  |
| Canada Lynx<br><i>Lynx canadensis</i> | Threatened     | Periodic; no confirmed sightings. | Species is not common within the Park boundary. No |

| Species   | Federal Status      | Documented Within Park  | Conservation Measures  |
|---|---------------------|---|--|
|   |                     |   | mitigation is needed.  |
| Gray Wolf<br><i>Canis lupus</i>                                 | Endangered          | Park is part of a home range, but not a documented breeding area. | Species is not known to use the Park as breeding or denning area. No mitigation is needed.   |
| Northern Long-Eared Bat (NLEB)<br><i>Myotis septentrionalis</i> | Endangered          | Species is documented within the Park.                            | Due to NLEB documentation within the park boundary, presence is assumed. Per FWS consultation via IPaC, mitigations include avoiding tree removal during the NLEB active season of May 15 – Aug 31. Alternatively, a bat survey should be conducted to determine presence/absence, with occupied trees marked for avoidance. |
| Tricolored Bat<br><i>Perimyotis subflavus</i>                   | Proposed Endangered | Species has not been documented within the Park.                  | Due to suitable habitat, presence is assumed. Per FWS consultation via IPaC, mitigations include avoiding tree removal during the NLEB active season of May 15 – Aug 31. Alternatively, a bat survey should be conducted to determine  |

| Species                                       | Federal Status                                     | Documented Within Park   | Conservation Measures   |
|---|--|--|---|
|   |  |  | presence/absence, with occupied trees marked for avoidance.   |
| <b>Birds</b>                                  |  |  |   |
| Bald Eagle<br><i>Haliaeetus leucocephalus</i> | Protected under Bald & Golden Eagle Protection Act | Known to nest within Park.   | A nesting bird survey should be performed, and any trees with nests should be avoided until nests are abandoned. Construction during nesting season should be avoided if nests are nearby project area. |
| Piping Plover<br><i>Charadrius melodus</i>    | Endangered   | Park beaches are foraging habitat.   | Project area is not located within preferred beach habitat. No mitigation needed.   |
| Rufa red knot<br><i>Calidris canutus rufa</i> | Threatened   | Prefers beach habitat for foraging and nesting. Red Knot migratory window of May 1 - September 30. | Project area is not located within preferred beach habitat. No mitigation needed.   |
| <b>Insects</b>                                |  |  |   |
| Monarch Butterfly<br><i>Danaus plexippus</i>  | Candidate  | Common within the Park.  | Avoid walking or moving equipment outside of the area of disturbance to avoid trampling or damaging any milkweed.   |



### 3.5.2 Environmental Consequences

**Methodology.** This analysis was prepared using the best information currently available from Park surveys and the USFWS IPaC tool. Impacts to federally listed threatened and endangered species and other flora and fauna were considered as part of this evaluation.

#### 3.5.2.1 No-Action Alternative: No Improvements

Under the No-Action Alternative, the NPS would perform routine operation and maintenance on the existing structures. The existing infrastructure would remain in place, and thus would not address concerns of the deteriorating conditions of the current viewing platform. No direct impacts to wildlife including threatened and endangered species are anticipated with implementation of the No-Action Alternative; however, erosion due to unauthorized trails would continue without NPS intervention, resulting in reduced water quality in the river and continued impacts to vegetation. Monarch butterflies could be negatively impacted if milkweed is removed, because monarch butterflies only lay eggs on milkweed and it is the sole food source for larvae.

**Cumulative Impacts.** The No-Action Alternative combined with present and reasonably foreseeable future activities would allow erosion impacts to continue, resulting in negative impacts. The Miners River bridge replacement project would cause temporary disturbance impacts to the surrounding forest habitat; however, the replacement project would not result in negative long-term impacts. The separate project that is adjusting the alignment of the Miners Fall Trail preceding this project location would have permanent impacts to potential suitable nesting and roosting habitat for bats and bald eagles if tree(s) need to be removed. The NPS will make reasonable efforts to preserve as much vegetation as possible to avoid negative cumulative impacts.

#### 3.5.2.2 Alternative 1: Extend Steps and Construct Rustic Trail to Bottom of Ravine (Proposed Action/Preferred Alternative)

Replacing the structures within the previous footprint would alleviate erosion by replacing a portion of the unauthorized trail with a wooden walkway and viewing platform. Construction of a designated and stabilized trail would additionally reduce the rate and volume of erosion. Providing directed public access to the river via a Park stair structure transitioning to a rustic trail would create a permanent disturbance to fish and other aquatic organisms by permitting more visitors access to the river. Construction noise and related activities would cause a temporary disturbance to wildlife within the project area. Noisy tools, such as chainsaws and chippers, would be operated in a manner that minimizes impacts on the soundscapes. Sound proofing of generators or other utilities would also be considered. Construction and maintenance activities would be limited to specific times and locations to minimize impacts to ecologically sensitive areas.

Though the additional structures would be placed on the previous footprint, it is likely that vegetation now inhabits a portion of that footprint. Although not a protected species, the removal of any milkweed within or near the footprint site could have a negative effect on the Monarch butterfly. If removal of tree(s) is required for optimal structure placement, this could pose a negative effect on the Bald eagle and bat species listed in **Table 1** by removing potentially suitable nesting and roosting habitat.

The installation of a rustic trail would not cause negative permanent impacts unless the removal of milkweed or trees are required and would have a beneficial impact to water quality and habitat by reducing erosion. Construction activities would avoid, to the extent practicable, the spread of invasive species to other areas of the Park that may not yet be infested. Construction crews would be educated in how to spot invasive species and what to do should they be encountered.

See section 2.3.8 Wildlife and Threatened and Endangered Species Protection for a complete list of mitigation measures and stipulations to improve viewshed protection and visitor experience. under Alternative 1.

**Cumulative Impacts.** The preferred alternative and present and reasonably foreseeable future activities would reduce erosion impacts by replacing the unauthorized trail to the river with a combination of constructed stair structure transitioning to a stabilized rustic trail to the bottom of the ravine, thus improving overall wildlife habitat quality. The Miners River bridge replacement project would cause temporary disturbance impacts to the surrounding forest habitat; however, the replacement project would not result in negative long-term impacts. The Miners Fall Trail alignment adjustment project would have permanent impacts to potential suitable nesting and roosting habitat for bats and bald eagles if tree(s) need to be removed to re-route the trail's existing footprint. Other projects may occur within the park around the same time as the project proposed in this EA. The NPS would make reasonable efforts to preserve as much vegetation as possible to avoid negative cumulative impacts.

### 3.5.2.3 Alternative 2: Extend Steps to Bottom of Ravine

Similarly to Alternative 1, construction noise and related activities would cause a temporary disturbance to wildlife within the project area. Providing directed public access to the river via a Park constructed staircase would create a permanent disturbance to fish and other aquatic organisms by permitting more visitors access to the river. Construction activities would avoid, to the extent practicable, the spread of these invasive species to other areas of the Park that may not yet be infested. Extending walkway structures to the river would have a beneficial effect on water quality by reducing erosion; however, if removal of tree(s) is required for optimal structure placement, this could pose a negative effect on the Bald eagle and bat species listed in **Table 1** by removing potentially suitable nesting and roosting habitat.

**Cumulative Impacts.** Alternative 2 and present and reasonably foreseeable future activities would reduce erosion impacts by replacing the unauthorized trail to the river with a constructed stair structure down to the bottom of the ravine, thus improving overall wildlife habitat quality. The Miners River bridge replacement project would cause temporary disturbance impacts to the surrounding forest habitat; however, the replacement project would not result in negative long-term impacts. The Miners Fall Trail alignment adjustment project preceding this project location would have permanent impacts to potential suitable nesting and roosting habitat for bats and bald eagles if tree(s) need to be removed. The NPS would make reasonable efforts to preserve as much vegetation as possible to avoid negative cumulative impacts.

### 3.5.2.4 Conclusion

Alternative 1 is preferred over the No-Action Alternative and Alternative 2 because it provides stabilization of the visitor-made unauthorized trails down the slope of the ravine, thereby reducing erosion, while also allowing for a more natural designated trail to the base of the ravine. The No-Action Alternative is not preferred, as leaving the existing structure in place would not resolve the erosion or vegetation impacts caused by the unauthorized trails which lead to impacts on vegetation and animal species. Alternative 1 *May Affect, but is Not Likely to Adversely Affect* the following federally protected, threatened, and/or endangered species: Canada lynx, gray wolf, and northern long-eared bat; and would have *No Effect* on the monarch butterfly, piping plover, pitcher's thistle, rufo red knot, or tricolored bat because habitat for these species is not found within the project area.

## 3.6 GEOLOGICAL RESOURCES

### 3.6.1 Affected Environment

Geologic history recorded in the sedimentary rocks and surficial deposits at the Park is limited to two widely separated intervals of geologic time, the Late Precambrian, Cambrian, and Early Ordovician Periods (500-800 million years before present), and the Lake Quaternary Period (two million years before present to the present). These deposits became the sandstone layers that are exposed within the lakeshore. The Au Train Formation is a sandstone that lies above the distinctive caprock above the lip of Munising and Bridalveil Falls. This harder sandstone is responsible for the presence of so many of the area's waterfalls, as it resists erosion better than other formations (NPS 2021c).

### 3.6.2 Environmental Consequences

**Methodology.** This analysis was prepared using the best information currently available from Park surveys. Impacts to geological resources within the Project Area were considered as part of this evaluation.

#### 3.6.2.1 No-Action Alternative: No Improvements

Under the No-Action Alternative, the NPS would perform routine operation and maintenance on the existing structures. The existing infrastructure would remain in place, and thus would not address concerns of the deteriorating conditions of the current viewing platform. No direct impacts are anticipated with implementation of the No-Action Alternative; however, sediment erosion due to unauthorized trails would continue without NPS intervention.

**Cumulative Impacts.** The No-Action Alternative and present and reasonably foreseeable future activities would allow erosion impacts to continue by leaving the unauthorized trail to the river in place.

### 3.6.2.2 Alternative 1: Extend Steps and Construct Rustic Trail to Bottom of Ravine (Proposed Action/Preferred Alternative)

Impacts to geological resources as a result of Alternative 1 would be minimal as installation of the step extensions and replacement of existing infrastructure would occur on previously disturbed areas. Disturbance may take place to a limited extent in which the stair structure is anchored to the ground by concrete pier, direct bury timber, or metal helical anchor alternative means of constructing. Final design of the footing system for the stair structure may require pinning footings to existing bedrock or to lesser extent, bearing on the bedrock once encountered. Depth of bedrock is not known and would be a field discovery at time of construction. Design would assume encountering bedrock and solutions for anchoring by pinning or bearing would be prescribed in advance of potential encounter. Additional limited disturbance may take place during construction based on type of equipment that is allowed for use within the ravine. It is anticipated however that equipment use would be limited to the smallest equipment capable of negotiating the steep slope, or more probable, remain within handheld or manual equipment types. Equipment which would result in significant rutting, compacting, or dislodging stone beyond the footprint of the trail alignment would be prohibited from use. In all conditions, dislodging or removal of existing geological resources (meaning subsurface large stone and bedrock) is not anticipated in constructing the stair structure portion of Alternative 1. No long-term disturbance or effect to geological resources are expected once the stair structure construction is completed.

A moderate level of disturbance, particularly to surface soils and suspended stone material within the soil, could occur for the installation of the rustic steps down to the river. This work would occur predominantly on previously disturbed unauthorized trail(s) created by visitors. Disturbance may include extracting and/or repositioning stone geology encountered near the surface while continuous formations of bedrock or larger boulder material encountered would dictate adjustment to the alignment of the trail. The installation of the trail prioritizes remaining as shallow as reasonably possible in how it is cut into the landscape and maximize shaping the trail to the influences of the existing topography. It is expected that equipment use would be limited to the smallest equipment capable of negotiating the steep slope, or more probable, remain within handheld or manual equipment types. Equipment which would result in significant rutting, compacting, or dislodging stone beyond the footprint of the trail alignment would be prohibited from use. Any rutting or disturbance of the surface soils and stone suspended in the upper levels of the soil would be reset within the project disturbed area as restoration efforts on site. In all conditions, dislodging or removal of existing geological resources (meaning subsurface large stone and bedrock) is not anticipated in constructing the trail portion of Alternative 1. No long-term disturbance or effect to geological resources are expected once the trail construction is completed beyond limited surface soil disturbance by foot traffic stepping off trail.

See section 2.3.3 Geological Resource Protection for a complete list of mitigation measures and stipulations to minimize impacts under Alternative 1.

**Cumulative Impacts.** The preferred alternative and present and reasonably foreseeable future activities would reduce erosion impacts by replacing the unauthorized trail to the river with a combination of constructed stair structure transitioning to a stabilized rustic trail. The future



alignment adjustments of Miners Falls Trail preceding this project location could impact previously undisturbed geological resources and the NPS would make every reasonable effort to minimize or avoid disturbance to geologically significant resources. The Miners River bridge replacement would occur on previously disturbed areas, therefore, would not impact geological resources.

### **3.6.2.3 Alternative 2: Extend Steps to Bottom of Ravine**

Impacts to geological resources as a result of Alternative 2 would be minimal as installation of the step extensions and replacement of existing infrastructure would occur on previously disturbed areas. Disturbance may take place to a limited extent in which the stair structure is anchored to the ground by concrete pier, direct bury timber, or metal helical anchor alternative means of constructing. Final design of the footing system for the stair structure may require pinning footings to existing bedrock or to lesser extent, bearing on the bedrock once encountered. Depth of bedrock is not known and would be a field discovery at time of construction. Design would assume encountering bedrock and solutions for anchoring by pinning or bearing would be prescribed in advance of potential encounter. Additional limited disturbance may take place during construction based on type of equipment that is allowed for use within the ravine. It is anticipated however that equipment use would be limited to the smallest equipment capable of negotiating the steep slope, or more probable, remain within handheld or manual equipment types. Equipment which would result in significant rutting, compacting, or dislodging stone beyond the footprint of the trail alignment would be prohibited from use. In all conditions, dislodging or removal of existing geological resources (meaning subsurface large stone and bedrock) is not anticipated in constructing the stair structures under Alternative 2. No long-term disturbance or effect to geological resources are expected once the stair structure construction is completed.

**Cumulative Impacts.** Alternative 2 and present and reasonably foreseeable future activities would reduce erosion impacts by replacing the unauthorized trail to the river with steps down to the bottom of the ravine. The future alignment adjustments of Miners Falls Trail preceding this project location could impact previously undisturbed geological resources and the NPS would make every reasonable effort to minimize or avoid disturbance to geologically significant resources. Other projects may occur within the park around the same time as the project proposed in this EA. The Miners River bridge replacement would occur on previously disturbed areas, therefore, would not impact geological resources.

### **3.6.2.4 Conclusion**

Alternative 1 is preferred over the No-Action Alternative and Alternative 2 because it provides a designated path to the bottom of the ravine like Alternative 2 but does so with a designated natural trail, which would enhance visitor use and experience as well as viewshed. Geological impacts would remain limited during construction by foundation installation design solutions and trail construction methods; however, long term impacts would be reduced by providing visitors with a stabilized route to the bottom of the ravine. The No-Action Alternative is not preferred, as leaving the existing unauthorized trails in place would leave the area open to further impacts to geological resources as erosive activity would persist and potential for dislodging stone or exposure of bedrock may result from the degradative processes.

## 3.7 WATER QUALITY AND AQUATIC RESOURCES

### 3.7.1 Affected Environment

Fish species within the Park include various species of trout, shiner, minnow, perch, and darter. Invertebrates that inhabit the rivers, lakes, and streams within the Park include aquatic earthworms, crayfish, and freshwater mussels, clams, snails, and limpets. Insects that inhabit or otherwise depend on the Park's freshwater resources include dragonflies, mayflies, caddisflies, water beetles, and butterflies. There is a wetland adjacent to the river and outside of the project area. Miners River and its associated streams are not listed as "Impaired" by the Clean Water Act Section 303(d) (USEPA 2024). Based on visual evaluation of the proposed project site, coupled with USFWS National Wetlands Inventory (NWI) exhibit for this location, a riverine wetland (USACE referenced as 'water of the US.') bounding Miners River is evident. Visual indication of wetlands above the riverine wetland and Ordinary High-Water Mark (OHWM) does not appear present nor probable given the elevation, landform, and sparse vegetative context. Staining on the bedrock facing additionally indicates a probable OHWM and potential floodplain are contained within the lower elevations directly adjacent to the normal flow of the river at the base of the waterfall. While future conditions based on climate change may raise the elevation of the OHWM, the stone substrate at the base of the waterfall and walls of the ravine are relatively stable in conveying flow from the watershed. Wetland conditions would not be expected to greatly increase beyond the current riverine formation. The existing floodplain elevation may increase; however, remain within the confines of the ravine.

### 3.7.2 Environmental Consequences

**Methodology.** Information gathered for this analysis includes the US Environmental Protection Agency's (EPA) waterbody report for Miners River and the Park's species lists. Research on water quality within Miners River was conducted on Michigan's Department of Environment, Great Lakes, and Energy (EGLE) water quality website; however, the most recent data collected in the river was in 2005. This report rated the habitat quality as "good" and the Macroinvertebrate Community Rating as "excellent" (EGLE 2005).

#### 3.7.2.1 No-Action Alternative: No Improvements

Under the No-Action Alternative, the NPS would perform routine operation and maintenance on the existing structures. The existing infrastructure would remain in place, and thus would not address concerns of the deteriorating conditions of the current viewing platform. The current visitor usage on the unauthorized trail causes minor erosion and transfer of sediment to the river by way of foot traffic. This erosion could worsen over time, causing negative impacts to water quality and aquatic resources.

**Cumulative Impacts.** The No-Action Alternative combined with present and reasonably foreseeable future activities would allow erosion of the hillside to continue, resulting in a net negative impact to water quality and aquatic habitat. The Miners River bridge replacement project

would cause temporary disturbance impacts to the surrounding forest habitat; however, the replacement project would not result in negative long-term impacts because it is a replacement of the existing bridge outside of the project area. The Miners Fall Trail alignment adjustments project preceding this project location would not address current erosional issues as the project is solely a trail re-routing effort, thus maintaining or contributing to a negative impact to water quality and aquatic habitat.

### **3.7.2.2 Alternative 1: Extend Steps and Construct Rustic Trail to Bottom of Ravine (Proposed Action/Preferred Alternative)**

Under Alternative 1, construction of a replacement staircase and viewing platforms on the previous footprint upslope from the river would have temporary, minor impacts to water quality and aquatic resources, provided silt fencing and proper mitigation measures are implemented and maintained during construction. Noise impacts from construction may temporarily impact fish and macroinvertebrate usage of the river within the project area. By placing a defined rustic trail transitioning from the stair structure to the river rather than the multiple routes of unauthorized visitor created trails, shoreline erosion due to visitor foot traffic would be reduced.

Increasing visitor use in the form of a Park-provided trail to Miners River would permanently increase water disturbance in the form of turbidity, sedimentation, litter, oils from sunscreens, and noise proportionate to actual increase of visitor use experienced at the bottom of the ravine. Turbidity can increase sediment transport and reduce phytoplanktons' ability to photosynthesize. Turbidity and sedimentation can affect brook and rainbow (steelhead) trout spawning and feeding. Both species lay eggs in the river bottom, and the eggs are sensitive to increases in sediment (MDNR 2024a) (MDNR 2024b). Additionally, increased foot traffic to the river could potentially cause damage to shoreline vegetation, thus exacerbating shoreline erosion. Increased anthropogenic chemicals in the form of sunscreen UV filters have the potential to degrade water quality at the river site as the UV blocking components can bioaccumulate in fish and other aquatic organisms (Pablo Gago-Ferrero 2015). Sensitive wetland habitat south of the existing and planned trail would also be subject to increased litter from visitor usage, and there is potential for some visitors to enter the wetland habitat which would cause negative impacts to the wetland flora and fauna.

Direct impacts to wetlands and floodplains within the limits of disturbance from constructing the preferred alternative would fall within the tolerance accepted by the DOI) DO#77-1 (wetlands) and DO#77-2 (floodplains). Based on visual evaluation of the proposed project site, coupled with the USFWS NWI exhibit for this location, a riverine wetland bounding Miners River is evident. Visual indication of wetlands above the riverine wetland and OHWM do not appear present nor probably given the elevation, landform, and sparse vegetative context. Staining on the bedrock facing additionally indicates a probably OHWM and potential floodplain are contained within the lower elevations directly adjacent to the normal flow of the river at the base of the waterfall. Additionally, within DO#77-2, the proposed use type defined as a constructed overlook and/or trail for Alternative 1 and other alternatives is within part VI, Scope B. Exempted Actions based on requiring little physical development and not involve overnight occupation. Based on the context of the project and interpretation of DO#77-1 and DO# 77-2, proceeding with a visitor access route

extending to the ravine bottom which remains above the riverine wetland boundary should be acceptable. Any direct impacts below the OHWM or to wetlands, occurring would remain less than 1/10<sup>th</sup> of an acre of disturbance.

Signage would be added at the trailhead and along the trail to encourage visitors to stay on established trails and walkways to reduce erosion and prevent visitors from disturbing wetland areas 100-150 feet south of the trail. Interpretive signs would be added at the viewing platforms with information about aquatic resources and ways that visitors can minimize their impacts.

**Cumulative Impacts.** Alternative 1 combined with present and reasonably foreseeable future activities would address erosion impacts from the hillside, resulting in a positive impact to water quality and aquatic habitat. The Miners River bridge replacement project would cause temporary disturbance impacts to the surrounding forest habitat; however, the replacement project would not result in negative long-term impacts. The Miners Fall Trail alignment project preceding this project location would not contribute to impacts as its location is beyond the rim of the hill slope and not directly in the contributing watershed. Other projects may occur within the park around the same time as the project proposed in this EA. Alternative 1 would have a beneficial impact to water quality by significantly reducing hillside erosion through removal of the multiple unauthorized trails; however, providing direct access to the river could encourage more of the public to enter the river, thus causing more frequent turbidity and sedimentation which is a negative impact to water quality and aquatic habitat.

### 3.7.2.3 Alternative 2: Extend Steps to Bottom of Ravine

The impacts to water quality and aquatic resources would be the same under Alternative 2 as Alternative 1. A constructed staircase to the river would significantly decrease the impact of erosion. This type of structure could also foster growth of plant species by diverting ground trampling foot-traffic from unauthorized trails to a built structure, which would also positively affect current erosion impacts. The placement of a constructed staircase in lieu of the unauthorized or Alternative 1 rustic trail would allow greater access to the river by a wider range of visitors than before. This would encourage additional foot traffic in and around the river, potentially causing damage to shoreline vegetation, which would cause shoreline erosion, and increasing turbidity in the water.

As with Alternative 1, direct impacts to wetlands and floodplains by the limits of disturbance from constructing Alternative 2 would also fall within the tolerances accepted by the DOI's DO's DO#77-1 and DO#77-2. Interpretations of the DO's supporting this as described under Alternative 1 above. Based on the context of the project and interpretation of DO#77-1 and DO#77-2, proceeding with a visitor constructed stair and platform landing extending to the ravine bottom which remains above the riverine wetland boundary should be acceptable. Any direct impacts below the OHWM or to wetlands, if occurring, would remain less than 1/10<sup>th</sup> of an acre of disturbance.

**Cumulative Impacts.** Combined with present and reasonably foreseeable future activities, impacts would be the same under Alternative 2 as they would be under Alternative 1.



**3.7.2.4 Conclusion**

The No-Action Alternative is not preferable due to the continued negative ecological effects of foot traffic from unauthorized visitor generated trails from the end of the stair structure down to the river. Both Alternative 1 and Alternative 2 would eliminate the unauthorized trails and reduce erosion and vegetation damage. Alternative 1 is the preferred alternative because it supports NPS's mission of providing visitor access to the natural resources while better maintaining the rustic and natural feel of the area than a built structure.

## 4 CONSULTATION AND COORDINATION

Consultation and coordination with federal, state, and local agencies, as well as Native American tribes, was conducted to identify issues and concerns related to natural and cultural resources within the Park. This chapter describes government and tribal consultation during the preparation of the EA.

### 4.1 GOVERNMENT CONSULTATION

Agency consultation is the early involvement of federal, state, local, and tribal government agencies that may be affected by the federal action, have regulatory purview for its actions, or offer subject matter expertise to aid in understanding of the consequences of an action or project. Each of these agencies will be notified of the EA availability and will be asked to review and comment on this EA prior to and during the public review period.

On March 14, 2024, during planning leading up to this EA, the NPS submitted pre-consultation letters to USFWS, SHPO and the following tribes (see **Appendix B**):

- Bad River Band of Lake Superior Tribe of Chippewa Indians
- Bay Mills Indian Community of Michigan
- Fond du Lac Band of Lake Superior Chippewa Indians
- Grand Portage Band of Lake Superior Chippewa Indians
- Keweenaw Bay Indian Community
- Lac Courte Orielles Band of Lake Superior Chippewa Indians
- Lac du Flambeau Band of Lake Superior Chippewa Indians
- Lac Vieux Desert Band of Lake Superior Chippewa Indians
- Red Cliff Band of Lake Superior Chippewa Indians
- Sault Tribe of Chippewa Indians

On March 19, 2024, the USFWS responded to the pre-consultation letter stating that the USFWS recommends the Park enter the project into the Michigan All Species Determination Key (D-key) tool in the IPaC system. In addition, the USFWS noted that the project may be able to receive an automated concurrence from the D-key depending on the details of the project and applicable best management practices (BMPs).

On May 22, 2024, the Park entered project information into the USFWS IPaC system and received automated concurrence with the following effect determinations:

**Table 2. Federally Listed Species Effect Determinations**

| <b>Species</b>          | <b>Listing Status</b> | <b>Determination</b>                  |
|-------------------------|-----------------------|---------------------------------------|
| Canada Lynx             | Threatened            | Not Likely to Adversely Affect (NLAA) |
| Gray Wolf               | Endangered            | NLAA                                  |
| Monarch Butterfly       | Candidate             | No effect                             |
| Northern Long-eared Bat | Endangered            | NLAA                                  |
| Piping Plover           | Endangered            | No effect                             |
| Pitcher's Thistle       | Threatened            | No effect                             |
| Rufa Red Knot           | Threatened            | No effect                             |
| Tricolored Bat          | Proposed Endangered   | No effect                             |

No changes to this determination were received from the Michigan Ecological Services Field Office within the standard 30-day verification period. See APPENDIX B For determination concurrence letters and species list from USFWS.

No response to pre-consultation requests were received from the consulted tribes. The EA will be submitted to the tribes for comment and review prior to the public release; any comments received will be considered and included in final EA documentation.

The internal NPS Cultural Resources Management Team reviewed the project and provided a No Historic Properties Affected determination per Section 106 of the National Historic Preservation Act. This assessment will be sent to the Michigan SHPO with the EA for comment and review prior to the public release; any comments received will be considered and included in final EA documentation.

## **5 LIST OF PREPARERS AND CONTRIBUTORS**

The persons responsible for the review of the proposed action, the supporting information and analyses and the preparation of the EA are listed below:

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## **7 APPENDIX A: ENVIRONMENTAL ISSUES AND TOPICS CONSIDERED BUT NOT RETAINED FOR DETAILED ANALYSIS**

Based on the Environmental Screening Form (ESF) prepared by the Interdisciplinary Team (IDT) during project planning, the following impact topics were not discussed in this EA because either the resource is not present within the study area or impacts to the resource would be negligible:

- Air Quality;
- Cultural Landscapes;
- Museum Collections;
- Prehistoric/historic structures;
- Ethnographic Resources;
- Socioeconomics;
- Soundscapes; and
- Wilderness

The issues and impact topics described below were considered by the National Park Service (NPS) during the planning phase. The impact topics described below were not retained for detailed analysis for one or more of the following reasons:

- The environmental impacts associated with the issue are not central to the proposal or of critical importance.
- A detailed analysis of environmental impacts related to the issue is not necessary to make a reasoned choice between alternatives.
- The environmental impacts associated with the issue are not contentious among the public or other agencies.
- There is no potential for significant impacts to resources associated with the issue.

The rationale for dismissal is provided in the following sections for:

- Archaeological resources; and
- Paleontological resources.

### **7.1 ARCHEOLOGICAL RESOURCES**

The NPS conducted an archeological survey in 1996. This survey determined that no historic above ground properties older than 50 years are present. In 2023, two shovel tests (excavations) approximately 9.3 meters apart were conducted at the proposed location for the new viewing platforms and staircase, adjacent to the current platform and staircase. Neither of the shovel tests yielded cultural materials. An additional 20 shovel tests along three proposed reroutes along the

trail to the falls were conducted. These shovel tests were generally placed between 4 meters and 10 meters apart, though a few were placed at slightly larger intervals (not more than 18.5 meters) due to vegetation to topographic limitations. None of these shovel tests yielded any cultural materials. Since impacts to archeological resources are not anticipated, this topic was not carried forward for detailed analysis in the EA.

## **7.2 PALEONTOLOGICAL RESOURCES**

Fossils are completely absent from the Jacobsville Formation and uncommon in the Munising Formation. Fragments of trilobites have been found in the Miners Castle member and 26 taxa conodonts (ancient relatives of jawless fish) in the upper Munising Formation and the lower Au Train Formation. The Au Train also contains Middle Ordovician cephalopod and gastropod fossils (NPS 2021c). The proposed improvements to the trail are in already disturbed areas and would not result in ground disturbance that would impact any paleontological resources. Therefore, this topic was not carried forward for detailed analysis in the EA.

## **8 APPENDIX B: AGENCY CONSULTATION LETTERS**



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Michigan Ecological Services Field Office  
2651 Coolidge Road Suite 101  
East Lansing, MI 48823-6360  
Phone: (517) 351-2555 Fax: (517) 351-1443



In Reply Refer To:

05/22/2024 20:26:58 UTC

Project code: 2024-0094024

Project Name: Miners Falls Viewing Platforms and Steps Replacement

Subject: Verification letter for the project named 'Miners Falls Viewing Platforms and Steps Replacement' for specified threatened and endangered species that may occur in your proposed project location consistent with the Michigan Endangered Species Determination Key (Michigan DKey)

Dear Lara Bender:

The U.S. Fish and Wildlife Service (Service) received on **May 22, 2024** your effect determination(s) for the 'Miners Falls Viewing Platforms and Steps Replacement' (the Action) using the Michigan DKey within the Information for Planning and Consultation (IPaC) system. The Service developed this system in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based on your answers and the assistance of the Service's Michigan DKey, you made the following effect determination(s) for the proposed Action:

| Species   | Listing Status | Determination |
|---|----------------|---------------|
| Canada Lynx ( <i>Lynx canadensis</i> )                    | Threatened     | NLAA          |
| Gray Wolf ( <i>Canis lupus</i> )                          | Endangered     | NLAA          |
| Monarch Butterfly ( <i>Danaus plexippus</i> )             | Candidate      | No effect     |
| Northern Long-eared Bat ( <i>Myotis septentrionalis</i> ) | Endangered     | NLAA          |
| Piping Plover ( <i>Charadrius melodus</i> )               | Endangered     | No effect     |
| Pitcher's Thistle ( <i>Cirsium pitcheri</i> )             | Threatened     | No effect     |
| Rufa Red Knot ( <i>Calidris canutus rufa</i> )            | Threatened     | No effect     |
| Tricolored Bat ( <i>Perimyotis subflavus</i> )            | Proposed       | No effect     |
|   | Endangered     |               |

The Service will notify you within 30 calendar days if we determine that this proposed Action does not meet the criteria for a "may affect, not likely to adversely affect" (NLAA) determination for Federally listed species in Michigan. If we do not notify you within that timeframe, you may proceed with the Action under the terms of the NLAA concurrence provided here. This



verification period allows the Michigan Ecological Services Field Office to apply local knowledge to evaluation of the Action, as we may identify a small subset of actions having impacts that were unanticipated. In such instances, the Michigan Ecological Services Field Office may request additional information to verify the effects determination reached through the Michigan DKey.

Your agency has met consultation requirements by informing the Service of your “No Effect” determination(s). No consultation is required for species that you determined will not be affected by the Action.

Please provide sufficient project details on your project homepage in IPaC (Define Project, Project Description) to support your conclusions and the Service’s 30-day review period. Failure to disclose important aspects of your project that would influence the outcome of your effects determinations may negate your determinations and invalidate this letter. If you have site-specific information that leads you to believe a different determination is more appropriate for your project than what the Dkey concludes, you can and should proceed based on the best available information.

The Service recommends that you contact the Service or re-evaluate the project in IPaC if: 1) the scope or location of the proposed Action is changed; 2) new information reveals that the action may affect listed species or designated critical habitat in a manner or to an extent not previously considered; 3) the Action is modified in a manner that causes effects to listed species or designated critical habitat; or 4) a new species is listed or critical habitat designated. If any of the above conditions occurs, additional consultation with the Service should take place before project changes are final or resources committed.

For non-Federal representatives: Please note that when a project requires consultation under section 7 of the Act, the Service must consult directly with the Federal action agency unless that agency formally designates a non-Federal representative (50 CFR 402.08). Non-Federal representatives may prepare analyses or conduct informal consultations; however, the ultimate responsibility for section 7 compliance under the Act remains with the Federal agency. If the Federal agency concurs with your determination, the project as proposed has completed section 7 consultation. All documents and supporting correspondence should be provided to the Federal agency for their records.

**Gray Wolf:**

Gray wolf may be present in the Action area. However, given the large amount of suitable wolf habitat available throughout the Upper Peninsula of Michigan, any wolves active on the landscape would be able to avoid project activities without incurring adverse impacts. Since you determined that the Action will not harm wolves directly (e.g., mammal trapping, poison bait) or indirectly ((e.g., increasing vehicle use that may result in vehicle strikes, exposure to potential human persecution), any potential effects would be insignificant.

**Bats of Conservation Concern:**

Implementing protective measures for bats, including both federally listed and non-listed species, indirectly helps to protect Michigan’s agriculture and forests. Bats are significant predators of nocturnal insects, including many crop and forest pests. For example, Whitaker (1995) estimated that a single colony of 150 big brown bats (*Eptesicus fuscus*) would eat nearly 1.3 million pest

insects each year. Boyles et al. (2011) noted the “loss of bats in North America could lead to agricultural losses estimated at more than \$3.7 billion/year, and Maine and Boyles (2015) estimated that the suppression of herbivory by insectivorous bats is worth >1 billion USD globally on corn alone. In captive trials, northern long-eared bats were found to significantly reduce the egg-laying activity of mosquitoes, suggesting bats may also play an important role in controlling insect-borne disease (Reiskind and Wund 2009). Mosquitoes have also been found to be a consistent component of the diet of Indiana bats and are eaten most heavily during pregnancy (6.6%; Kurta and Whitaker 1998). Taking proactive steps to help protect bats may be very valuable to agricultural and forest product yields and pest management costs in and around a project area. Such conservation measures include limiting tree clearing during the bat active season (April through October varies by location) and/or the non-volant period (June through July), when young bats are unable to fly, and minimizing the extent of impacts to forests, wetlands, and riparian habitats.

### **Bald and Golden Eagles:**

Bald eagles, golden eagles, and their nests are protected under the Bald and Golden Eagle Protection Act (54 Stat. 250, as amended, 16 U.S.C. 668a-d) (Eagle Act). The Eagle Act prohibits, except when authorized by an Eagle Act permit, the “taking” of bald and golden eagles and defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.” The Eagle Act’s implementing regulations define disturb as “...to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”

If the Action may impact bald or golden eagles, additional coordination with the Service under the Eagle Act may be required. For more information on eagles and conducting activities in the vicinity of an eagle nest, please visit <https://www.fws.gov/library/collections/all-about-eagles>. In addition, the Service developed the National Bald Eagle Management Guidelines (May 2007) in order to assist landowners in avoiding the disturbance of bald eagles. The full Guidelines are available at <https://www.fws.gov/media/national-bald-eagle-management-guidelines-0>.

If you have further questions regarding potential impacts to eagles, please contact Chris Mensing, [Chris\\_Mensing@fws.gov](mailto:Chris_Mensing@fws.gov) or 517-351-2555.

### **Monarch butterfly and other pollinators**

In December 2020, after an extensive status assessment of the monarch butterfly, we determined that listing the monarch under the Endangered Species Act is warranted but precluded by higher priority actions to amend the Lists of Endangered and Threatened Wildlife and Plants. Therefore, the Service added the monarch butterfly to the candidate list. The Service will review its status each year until we are able to begin developing a proposal to list the monarch.

The Endangered Species Act does not establish protections or consultation requirements for candidate species. Some Federal and State agencies may have policy requirements to consider candidate species in planning. We encourage implementing measures that will remove or reduce threats to these species and possibly make listing unnecessary.

For all projects, we recommend the following best management practices (BMPs) to benefit monarch and other pollinators.

### Monarch and Pollinator BMP Recommendations

Consider monarch and other pollinators in your project planning when possible. Many pollinators are declining, including species that pollinate key agricultural crops and help maintain natural plant communities. Planting a diverse group of native plant species will help support the nutritional needs of Michigan's pollinators. We recommend a mix of flowering trees, shrubs, and herbaceous plants so that something is always blooming and pollen is available during the active periods of the pollinators, roughly early spring through fall (mid-March to mid-October). To benefit a wide variety of pollinators, choose a wide range of flowers with diverse colors, heights, structure, and flower shape. It is important to provide host plants for any known butterfly species at your site, including native milkweed for Monarch butterfly. Incorporating a water source (e.g., ephemeral pool or low area) and basking areas (rocks or bare ground) will provide additional resources for pollinators.

Many pollinators need a safe place to build their nests and overwinter. During spring and summer, leave some areas unmowed or minimize the impacts from mowing (e.g., decrease frequency, increase vegetation height). In fall, leave areas unraked and leave plant stems standing. Leave patches of bare soil for ground nesting pollinators.

Avoid or limit pesticide use. Pesticides can kill more than the target pest. Some pesticide residues can kill pollinators for several days after the pesticide is applied. Pesticides can also kill natural predators, which can lead to even worse pest problems.

Planting native wildflowers can also reduce the need to mow and water, improve bank stabilization by reducing erosion, and improve groundwater recharge and water quality.

### Resources:

<https://www.fws.gov/initiative/monarchs>

<https://www.fws.gov/library/collections/pollinators>

### Wetland impacts:

Section 404 of the Clean Water Act of 1977 (CWA) regulates the discharge of dredged or fill material into waters (including wetlands) of the United States. Regulations require that activities permitted under the CWA (including wetland permits issued by the Michigan Department of Environment, Great Lakes, and Energy (EGLE)) not jeopardize the continued existence of species listed as endangered or threatened. Permits issued by the U.S. Army Corps of Engineers must also consider effects to listed species pursuant to section 7 of the Endangered Species Act. The Service provides comments to the agencies that may include permit conditions to help avoid or minimize impacts to wildlife resources including listed species. For this project, we consider the conservation measures you agreed to in the determination key and/or as part of your proposed action to be non-discretionary. If you apply for a wetland permit, these conservation measures should be explicitly incorporated as permit conditions. Include a copy of this letter in your wetland permit application to streamline the threatened and endangered species review process.

**Bat References**

- Boyles, J.G., P.M. Cryan, G.F. McCracken, T.H. Kunz. 2011. Economic Importance of Bats in Agriculture. *Science* 332(1):41-42.
- Kurta, A. and J.O. Whitaker. 1998. Diet of the Endangered Indiana Bat (*Myotis sodalis*) on the Northern Edge of Its Range. *The American Midland Naturalist* 140(2):280-286.
- Reiskind, M.H. and M.A. Wund. 2009. Experimental assessment of the impacts of northern long-eared bats on ovipositing *Culex* (Diptera: Culicidae) mosquitoes. *Journal of Medical Entomology* 46(5):1037-1044.
- Whitaker, Jr., J.O. 1995. Food of the big brown bat *Eptesicus fuscus* from maternity colonies in Indiana and Illinois. *American Midland Naturalist* 134(2):346-360.

**Summary of conservation measures for your project** You agreed to the following conservation measures to avoid adverse effects to listed species and our concurrence is only valid if the measures are fully implemented. These must be included as permit conditions if a permit is required and/or included in any contract language.

**Listed bats:** The action will not include temporary or permanent lighting of roadway(s), facility(ies), and/or parking lot(s).

**Listed bats:** Any cutting/trimming of potential roost trees for northern long-eared bat (trees  $\geq 3$  inches in diameter [at breast height] with cracks, crevices, cavities, and/or exfoliating bark) will occur outside the summer roosting period for northern long-eared bat (that is, limited to September 1 through May 14). Prescribed fire and/or pesticide application will also occur during September 1 through May 14 where potential roost trees are present.

Tree cutting/trimming and/or prescribed burning will not clear  $\geq 20$  contiguous acres of forest or fragment a connective corridor between 2 or more forest patches of at least 5 acres.

**Listed bats:** Tree cutting/trimming and/or prescribed burning will not clear  $\geq 10$  contiguous acres of forest (including both modeled and unmodeled potential habitat) or fragment a connective corridor between 2 or more forest patches of at least 5 acres.

**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

Miners Falls Viewing Platforms and Steps Replacement

**2. Description**

The following description was provided for the project 'Miners Falls Viewing Platforms and Steps Replacement':

The National Park Service (NPS) is beginning the preparation of a plan for infrastructure repairs to the Miners Falls Viewing Platforms and Steps. Miners Falls is located off of Miners Castle Road, about 10 miles northeast of Munising, Michigan. The fast-flowing Miners River drops about 60 feet over a sandstone outcrop, creating the park's most powerful waterfall. The walk from the parking area to the waterfall is 0.6 miles down a gently-rolling path through the forest which leads to an upper and a lower overlook.

Miners Falls Trail is a gravel path through a deep woods environment which leads to two overlooks to Miners River and a waterfall that plunges approximately 60 feet over a cliff. The overlooks are the terminus of the trail. However, one of the overlooks has deteriorated overtime and no longer exists. The structures are constructed of treated timbers and lumber. The staircase and lower overlook are situated on a steep slope, extending approximately midway down the valley hillslope. Historically, there is evidence that a previous staircase provided access to the bottom of the valley.

Due to age and location within a frequently damp forested area of limited sun exposure, the current structures are progressively deteriorating to a state of potential safety concerns for the visiting public. Additionally, public demand for access to the river has created undesignated trails which are causing erosion and damage to the surrounding vegetation. The purpose of this project is to provide safe public access to the Miners River and base of Miners Falls, while reducing impacts to the natural environment and address public request for access to the river.

NPS is preparing an environmental assessment to analyze impacts from this project and will provide to FWS for review.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@46.4747139,-86.53160395502577,14z>





## QUALIFICATION INTERVIEW

1. Are there any possible effects to any listed species or to designated critical habitat from your project or effects from any other actions or projects subsequently made possible by your project?

Select "Yes" even if the expected effects to the species or critical habitat are expected to be 1) extremely unlikely (discountable), 2) can't meaningfully be measured, detected, or evaluated (insignificant), or 3) wholly beneficial.

Select "No" to confirm that the project details and supporting information allow you to conclude that listed species and their habitats will not be exposed to any effects (including discountable, insignificant, or beneficial effects) and therefore, you have made a "no effect" determination for all species. If you are unsure, select YES to answer additional questions about your project.

Yes

2. This determination key is intended to assist the user in the evaluating the effects of their actions on Federally listed species in Michigan. It does not cover other prohibited activities under the Endangered Species Act (e.g., for wildlife: import/export, Interstate or foreign commerce, possession of illegally taken wildlife, purposeful take for scientific purposes or to enhance the survival of a species, etc.; for plants: import/export, reduce to possession, malicious destruction on Federal lands, commercial sale, etc.) or other statutes. Click yes to acknowledge that you must consider other prohibitions of the ESA or other statutes outside of this determination key.

Yes

3. Is the action the approval of a long-term (i.e., in effect greater than 10 years) permit, plan, or other action? (e.g., a new or re-issued hydropower license, a large-scale land management plan, or other kinds of documents that provide direction for projects or actions that may be conducted over a long term (>10 years) without the need for additional section 7 consultation).

No

4. Is the action being funded, authorized, or carried out by a Federal agency?

Yes

5. Does the action involve the installation or operation of wind turbines?

No

6. Are there at least 30 days prior to your action occurring? Endangered species consultation must be completed before taking any action that may have effects to listed species. The Service also needs 30 days to review projects before we can verify conclusions in some dkey output letters. For example, if you have already started some components of the project on the ground (e.g., removed vegetation) before completing this key, answer “no” to this question. The only exception is if you have a Michigan Field Office pre-approved emergence survey (i.e., if you have conducted pre-approved emergence surveys for listed bats before tree removal, you can still answer yes to this question).

Yes

7. Does the action involve constructing a new communications tower or modifying an existing communications tower?

No

8. Does the activity involve aerial or other large-scale application of any chemical (including insecticide, herbicide, etc.)?

No

9. Does your project include water withdrawal (ground or surface water) greater than 10,000 gallons/day?

No

10. Will your action permanently affect hydrology?

No

11. Will your action temporarily affect hydrology?

No

12. Will your project have any direct impacts to a stream or river (e.g., Horizontal Directional Drilling (HDD), hydrostatic testing, stream/road crossings, new storm-water outfall discharge, dams, other in-stream work, changes to water quality or hydrology, etc.)?

No

13. Does your project have the potential to indirectly impact the stream/river or the riparian zone (e.g., cut and fill, horizontal directional drilling, hydrostatic testing, construction, vegetation removal, discharge, changes to water quality or hydrology, etc.)?

Yes

14. Are you applying for one of the following Michigan EGLE/Army Corps of Engineers joint permit application Minor Permit (MP) Categories:  
MP 3 - Boat Hoist; MP 5 - Boal Wells; MP 7 - Completed Enforcement Actions; MP 13 - Dock;  
MP 22 - Fish and Wildlife Habitat Structures;  
MP 25 - Ford Stream Crossings for Commercial Forestry Operations;  
MP 31 - Maintenance and Repair of Serviceable Structures;  
MP 52 - Temporary Recreational Structures;  
MP 54 - Wetland Habitat Restoration and Enhancement?

Verify the MP category number and associated description matches your project/application ([https://www.michigan.gov/documents/egle/WRD-Minor-Project-Categories\\_733320\\_7.pdf](https://www.michigan.gov/documents/egle/WRD-Minor-Project-Categories_733320_7.pdf)). If you don't know what category applies for your project, answer no to this question.

No

15. Are you applying for one of the following Michigan EGLE/Army Corps of Engineers joint permit application General Permit (GP) Categories:  
GP A - Aids to Navigation;  
GP C - Clear Span Bridge;  
GP J - Dry Fire Hydrant;  
GP O - Minor Permit Revisions and Transfers;  
GP Q - Mooring Buoy;  
GP W - Scientific Measuring Devices;  
GP X - Snow Road Stream Crossings for Forestry Operations;  
GP Z - Spring Piles and Piling Clusters?

Verify the GP category number and associated description matches your project/application ([https://www.michigan.gov/documents/deq/wrd-general-permit-categories\\_555828\\_7.pdf](https://www.michigan.gov/documents/deq/wrd-general-permit-categories_555828_7.pdf)). If you don't know what category applies for your project, answer no to this question.

No

16. Will your action disturb the ground or existing vegetation? This includes any off road vehicle access, soil compaction, digging, seismic survey, directional drilling, heavy equipment, grading, trenching, placement of fill, pesticide application, vegetation management (including removal or maintenance using equipment or chemicals), cultivation, development, etc.

Yes

17. Is the action a utility-scale solar development project?

**Note:**Solar projects are considered utility scale if they will be 1 megawatt or larger.

No

18. [Hidden semantic] Does the action intersect the MOBU AOI?

**Automatically answered**

Yes

19. Under the ESA, monarchs remain warranted but precluded by listing actions of higher priority. The monarch is a candidate for listing at this time. The Endangered Species Act does not establish protections or consultation requirements for candidate species. Some Federal and State agencies may have policy requirements to consider candidate species in planning. We encourage implementing measures that will remove or reduce threats to these species and possibly make listing unnecessary. If your project will have no effect on monarch butterflies (for example, if your project won't affect their habitat or individuals), then you can make a "no effect" determination for this project. Are you making a "no effect" determination for monarch?

Yes

20. [Hidden Semantic] Does the action area intersect the piping plover area of influence?

**Automatically answered**

Yes

21. [Hidden Semantic] Does the action area intersect the rufa red knot area of influence?

**Automatically answered**

Yes

22. [Hidden Semantic] Does the action area intersect the gray wolf area of influence?

**Automatically answered**

Yes

23. Does the action area intersect with a known gray wolf denning or rendezvous area?

No

24. Is there any potential for the action to harm wolves directly (e.g., mammal trapping, poison bait), or indirectly (e.g., increasing vehicle use that may result in vehicle strikes, exposure to potential human persecution)?

No

25. [Hidden Semantic] Does the action area intersect the lynx area of influence?

**Automatically answered**

Yes

26. Is there any potential for this action to harm Canada lynx directly (e.g., mammal trapping, poison bait)?

No

27. [Hidden Semantic] Does the action area intersect the area of influence for Pitcher's thistle?

**Automatically answered**

Yes

28. The project has the potential to affect federally listed bats. Does the action area contain any known or potential bat hibernacula (natural caves, abandoned mines, or underground quarries)?  
*No*
29. Has a presence/absence bat survey or field-based habitat assessment following the Service's Range-wide [Indiana Bat and Northern Long-eared Bat Summer Survey Guidelines](#) been conducted within the action area?  
*No*
30. Does the action involve removal/modification of a human structure (barn, house or other building) known to contain roosting bats?  
*No*
31. Does the action include removal/modification of an existing bridge or culvert?  
*No*
32. Does the action include temporary or permanent lighting of roadway(s), facility(ies), and/or parking lot(s)?  
*No*
33. Does the action include one or more of the following: (1) tree cutting/trimming, (2) prescribed fire, (3) pesticide (including insecticide and/or rodenticide), and/or (4) herbicide/fungicide application?  
*Yes*
34. Does the action include herbicide application?  
*No*
35. Will the action clear >10 acres of contiguous forest (i.e., connected by 1,000 feet or less) or fragment a riparian or other connective forested corridor (e.g., tree line) between 2 or more forest patches of at least 5 acres? For more information, see [Appendix II](#).  
*No*
36. Does the action area contain potential NLEB bat roost trees (trees  $\geq 3$  inches in diameter [at breast height] with cracks, crevices, cavities and/or exfoliating bark)? For more information, see [Appendix IV](#).  
*Yes*
37. Does the action include emergency cutting/trimming of hazard trees in order to prevent imminent loss of human life and/or property?  
*No*
38. [Semantic] Is any portion of the action area within 5 miles of a known Indiana or northern long-eared bat hibernaculum?  
**Automatically answered**  
*No*



39. [Hidden Semantic] Does this project intersect the northern long-eared bat area of influence?

**Automatically answered**

Yes

40. Will all tree cutting/trimming, prescribed fire, and/or pesticide application be conducted outside the northern long-eared bat summer roosting period of May 15 through August 31 (that is, limited to September 1 through May 14)?

Yes

41. [Hidden semantic] Does the action intersect the Tricolored bat AOI/SLA/range?

**Automatically answered**

Yes

42. The tricolored bat was proposed for listing as endangered on September 13, 2022. In Michigan, the tricolored bat was rare pre-white nose syndrome (WNS) and is exceedingly rare post-WNS. The species has been observed in 12 Michigan counties to date, largely during the fall or winter. With very few exceptions, the species has not been observed in Michigan in the summer months, and no maternity colonies have been found. During winter, tricolored bats hibernate in caves, abandoned mines, and abandoned tunnels ranging from small to large in size. During spring, summer and fall months, they roost primarily among leaf clusters of live or recently dead deciduous/hardwood trees.

Are you making a no effect determination on this project for the tricolored bat?

Yes

## **IPAC USER CONTACT INFORMATION**

Agency: National Park Service  
Name: Lara Bender  
Address: PO Box 40  
City: Munising  
State: MI  
Zip: 49862  
Email: lara\_bender@nps.gov  
Phone: 9062020053



# United States Department of the Interior

NATIONAL PARK SERVICE  
Pictured Rocks National Lakeshore  
P.O. Box 40  
Munising, Michigan 49862

IN REPLY REFER TO: 1.A.2

March 14, 2024

Scott Hicks  
Field Supervisor  
Michigan Ecological Services Field Office  
2651 Coolidge Road, Suite 101  
East Lansing, MI 48823

Re: Preliminary Consultation for Miners Falls Stairs and Steps Project

Dear Mr. Hicks,

The National Park Service (NPS) is preparing an Environmental Assessment (EA) to support management decisions on a project to rehabilitate the overlook platforms and stair structures at Miners Falls within Pictured Rocks National Lakeshore (PIRO).

Section 7 of the Endangered Species Act of 1973 requires that a federal agency consult with the U.S. Fish and Wildlife Service on any action that may affect endangered or threatened species or candidate species or that may result in adverse modification of critical habitat. This letter serves to initiate informal consultation with your office under section 7(c) of the Endangered Species Act for the referenced project. As part of the EA analysis, NPS will use the Information for Planning and Consultation (IPaC) system to analyze impacts on threatened, endangered, and candidate species within the project area.

The purpose of the proposed Miners Falls project is to provide safe public access to the Miners River and the base of Miners Falls, while reducing impacts to the natural environment. The need for action at this time is that the current infrastructure is deteriorating and in need of replacement. Additionally, public demand for access to the river has created undesigned trails which are causing erosion and damage to the vegetation.

Three alternatives are being considered. The “no action alternative” would replace existing infrastructure in kind with no access to the river or base of the falls. Action Alternative 1 would replace existing infrastructure in a similar design with a rustic-style trail diverting from the built infrastructure to allow access to the river and base of falls. Action Alternative 2 would replace existing infrastructure in a similar design with a stair structure to the river and access to the base

of the falls. Please find attached additional background information, including maps, photos, and alternative schematics.

Please contact Lara Bender, Environmental Protection Specialist at 906-202-0053 or [lara\\_bender@nps.gov](mailto:lara_bender@nps.gov) with any questions or comments. If we can provide any additional resources or information, please let us know by April 13, 2024 as we work to complete the environmental assessment process.

Sincerely,

**DAVID HORNE** Digitally signed by DAVID HORNE  
Date: 2024.03.14 12:37:37 -04'00'

David Horne, Superintendent

Enclosures

# Pictured Rocks National Lakeshore

## Miners Falls Viewing Platforms & Steps Rehabilitation Project Location

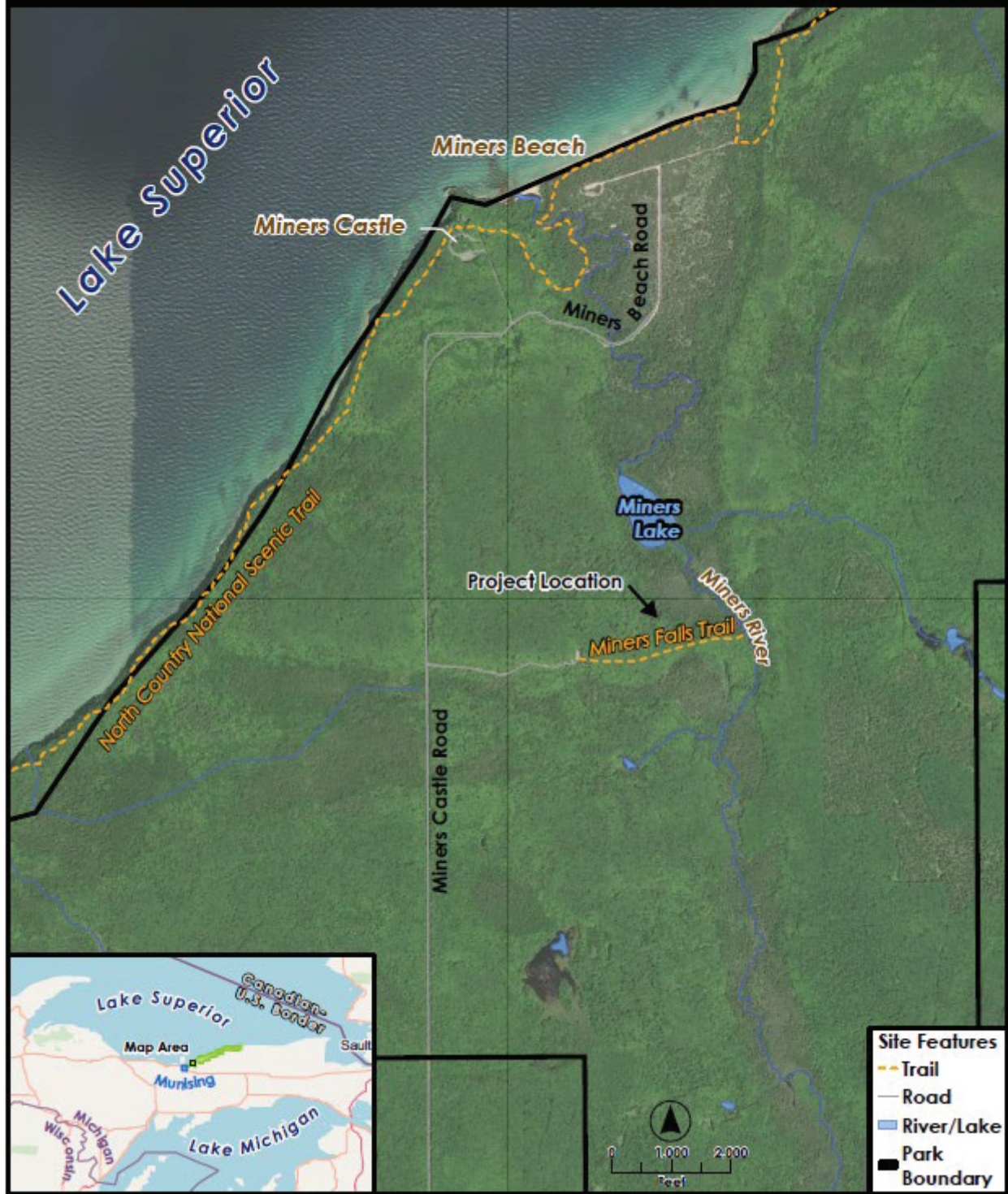


Figure 1 – Project location map.



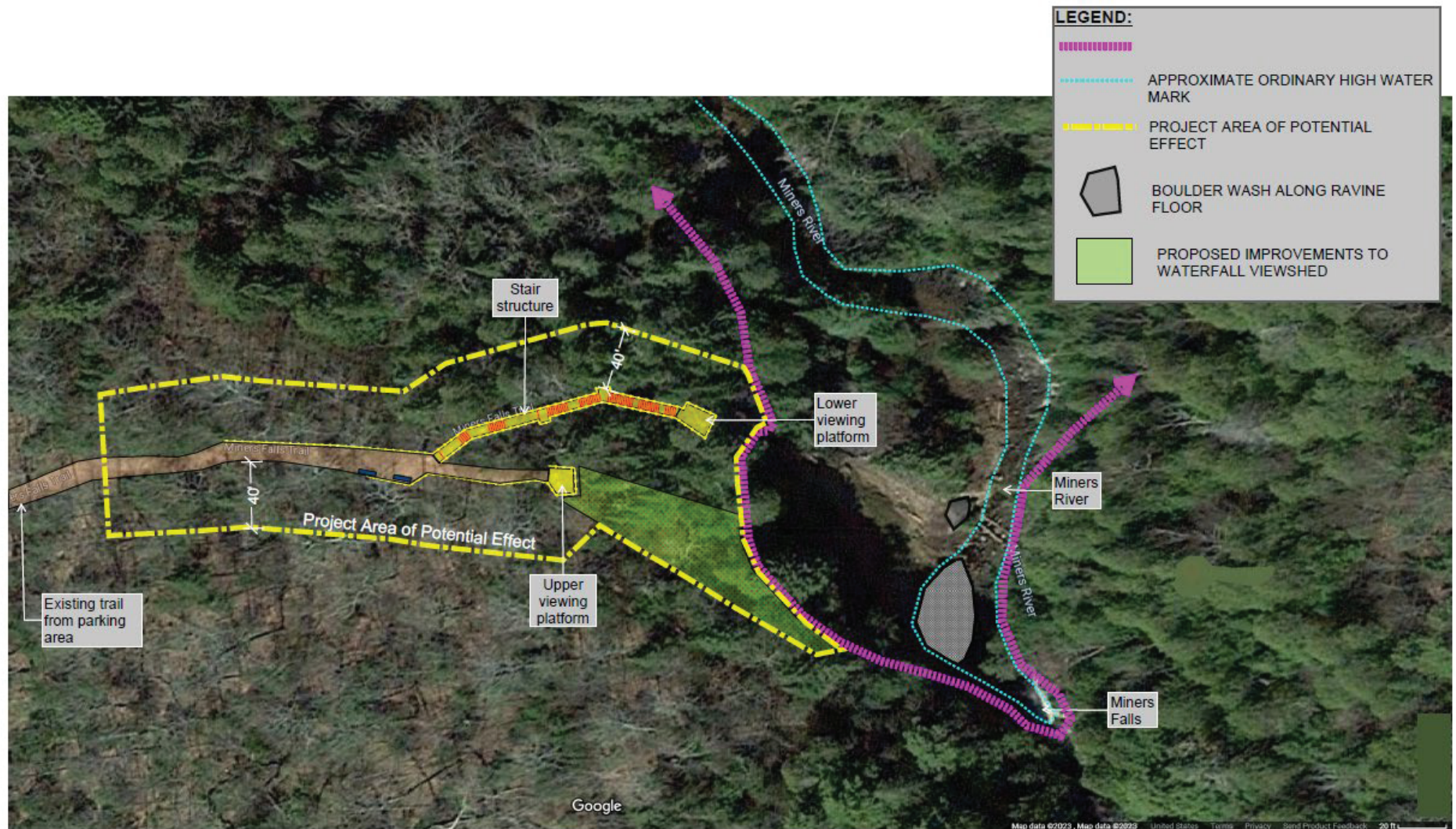


Figure 2 – Undesignated trails leading to valley floor.



Figure 3 – Damage from undesignated trails between lower platform and river.





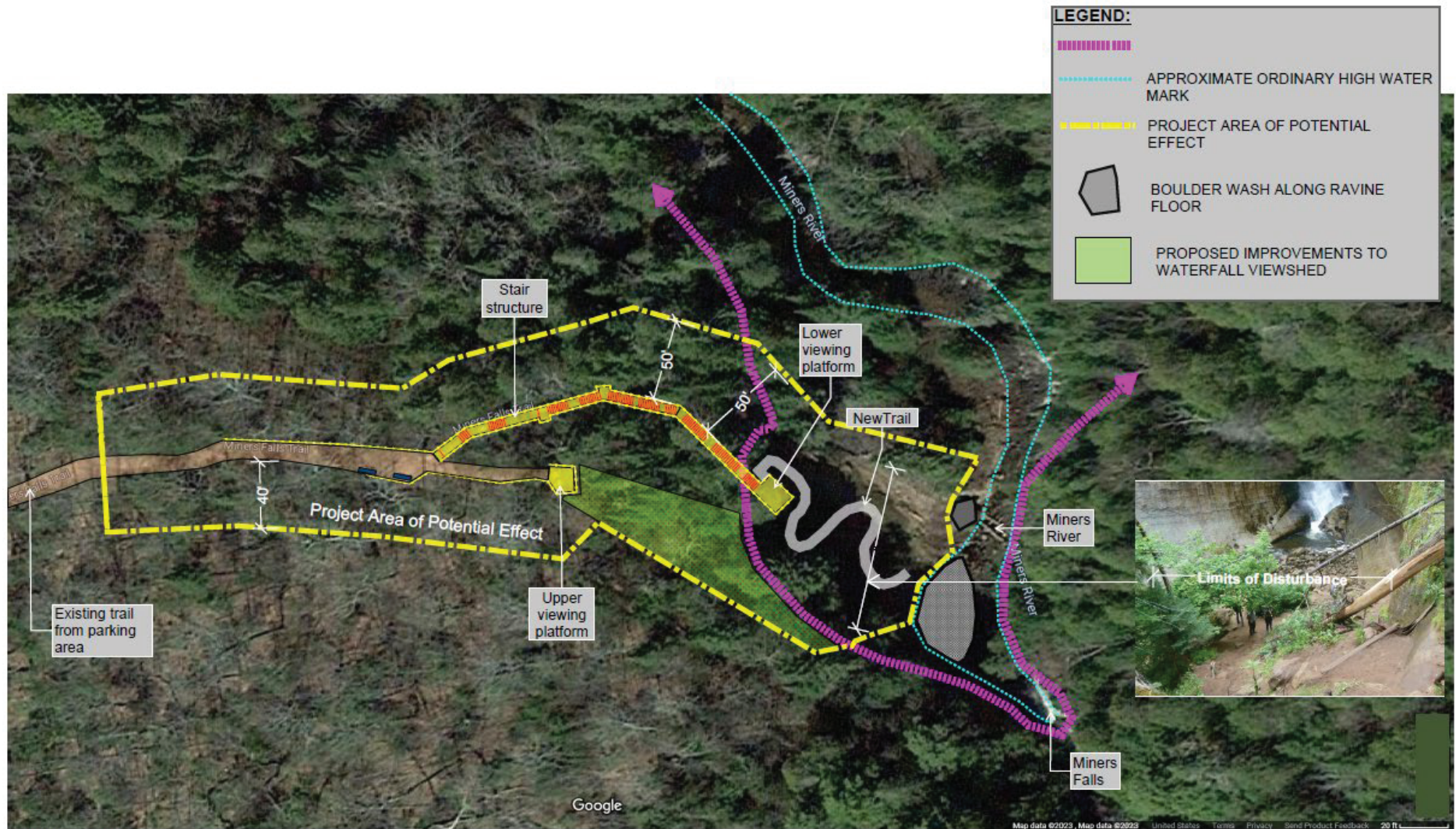
MINERS FALLS STEPS AND OVERLOOK  
No-Action Alternative Exhibit



March 2024

Figure 4. No Action Alternative Schematic





MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps Further into the Ravine

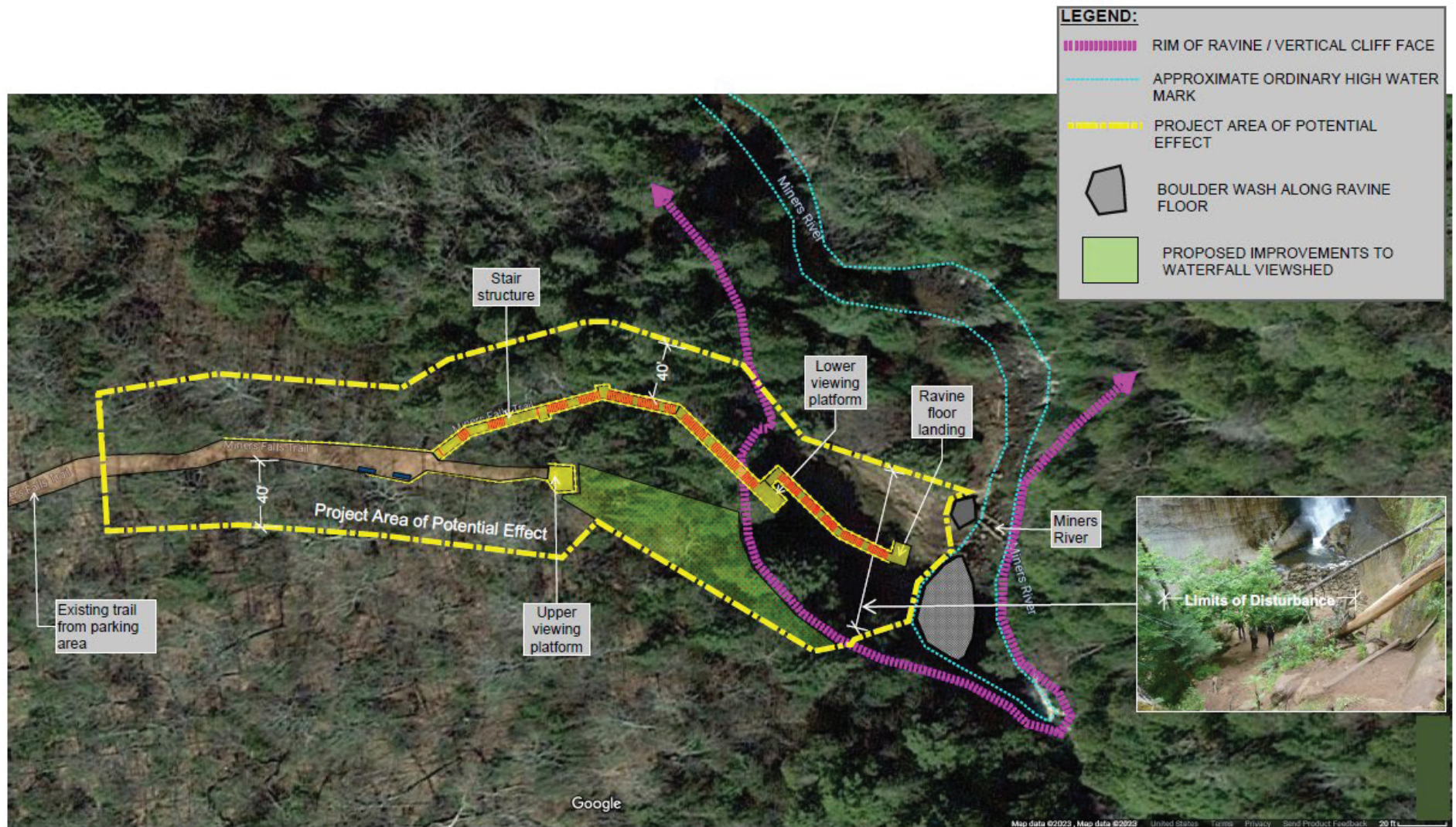


NORTH

March 2024

Figure 5. Action Alternative 1





# MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps to base of the Ravine



NORTH

March 2024

Figure 6. Action Alternative 2

**From:** [East Lansing, FW3](#)  
**To:** [Bender, Lara B](#)  
**Subject:** Re: Miners Falls - pre consultation  
**Date:** Tuesday, March 19, 2024 1:04:34 PM

---

Hi Lara,

Thanks for the information. Looks like you are planning to use our IPAC system and the Michigan All Species Determination Key, which is great. Depending on the details of the project and applicable BMPs you may be able to receive an automated concurrence from the Dkey (more info pasted below).

Thanks

Scott

We recommend entering the project into our on-line planning tool -- the Michigan All Species Determination Key (D-key) in our IPaC system (please note its the first option of D-keys in IPaC.).

Resources on how to use IPaC --

[https://www.fws.gov/sites/default/files/documents/MIFO\\_IPAC\\_instructions\\_revised%20Jan2022\\_FINAL\\_0.pdf](https://www.fws.gov/sites/default/files/documents/MIFO_IPAC_instructions_revised%20Jan2022_FINAL_0.pdf)

Video on how to use the All Species Michigan Dkey: <https://www.youtube.com/watch?v=FfcerNCiLOIDkey>

In some cases, the All Species determination Key will provide an automated concurrence for a project (e.g., by implementing certain standard BMPs where needed).

In IPAC are other tools, please **DO NOT** use the Consultation Package Builder (it is not needed for this type of project and the tool is still under development) and when it comes to the IPAC D-keys be sure to use the "Michigan All Species"

Depending upon what's planned for construction and operation you may or may not be able to qualify for an automated concurrence for a project. In any case the D-key will help you narrow down which species will need additional information in order to evaluate effects. This ESA section 7 technical assistance website may also help with next steps if the project doesn't receive an automated concurrence-  
[https://www.fws.gov/office/midwest-region-headquarters/midwest-section-7-technical-assistance#:~:text=Section%20of%20the%20Endangered,and%20Wildlife%20Service%20\(USFWS\).](https://www.fws.gov/office/midwest-region-headquarters/midwest-section-7-technical-assistance#:~:text=Section%20of%20the%20Endangered,and%20Wildlife%20Service%20(USFWS).)

If you after entering the project into the Michigan All Species Determination Key you have questions, please let us know.

---

**From:** Bender, Lara B <lara\_bender@nps.gov>  
**Sent:** Friday, March 15, 2024 8:48 AM  
**To:** East Lansing, FW3 <EastLansing@fws.gov>  
**Subject:** Miners Falls - pre consultation

Hello,

Please see the attached letter regarding an Environmental Assessment underway at Pictured Rocks National Lakeshore.

Thanks for your time,

Lara

---

Lara Bender

Environmental Protection Specialist

Pictured Rocks National Lakeshore

[lara\\_bender@nps.gov](mailto:lara_bender@nps.gov)

Cell # 906-202-0053



# United States Department of the Interior

NATIONAL PARK SERVICE  
Pictured Rocks National Lakeshore  
P.O. Box 40  
Munising, Michigan 49862

IN REPLY REFER TO: 1.A.2

March 14, 2024

Chairman Robert Blanchard  
Bad River Band of Lake Superior Tribe of Chippewa Indians  
PO Box 39  
Odanah, WI 54861

Re: Preliminary Consultation for Miners Falls Stairs and Steps Project

Dear Chairman Blanchard,

The National Park Service (NPS) is preparing an Environmental Assessment (EA) to support management decisions on a project to rehabilitate the overlook platforms and stair structures at Miners Falls within Pictured Rocks National Lakeshore.

Pictured Rocks National Lakeshore is requesting government to government consultation under 36 CFR 800.3, Section 106 of the National Historic Preservation Act, Executive Order 13175, and Secretarial Order 3403 regarding this project.

The purpose of the proposed Miners Falls project is to provide safe public access to the Miners River and the base of Miners Falls, while reducing impacts to the natural environment. The need for action at this time is that the current infrastructure is deteriorating and in need of replacement. Additionally, public demand for access to the river has created undesignated trails which are causing erosion and damage to the vegetation.

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As part of the EA process, environmental and cultural impacts are being analyzed. Archeological surveys have been conducted in the area where possible. We welcome any input,

consultation, or guidance you would be willing to provide.

Please contact me at [david\\_horne@nps.gov](mailto:david_horne@nps.gov) or at 906-202-0117 with any questions or comments. If we can provide any additional resources or information, please let us know by April 14, 2024 as we work to complete the environmental assessment process.

Sincerely,

**DAVID HORNE** Digitally signed by DAVID HORNE  
Date: 2024.03.14 13:51:57 -04'00'

David Horne, Superintendent

Enclosures



# Pictured Rocks National Lakeshore

## Miners Falls Viewing Platforms & Steps Rehabilitation Project Location

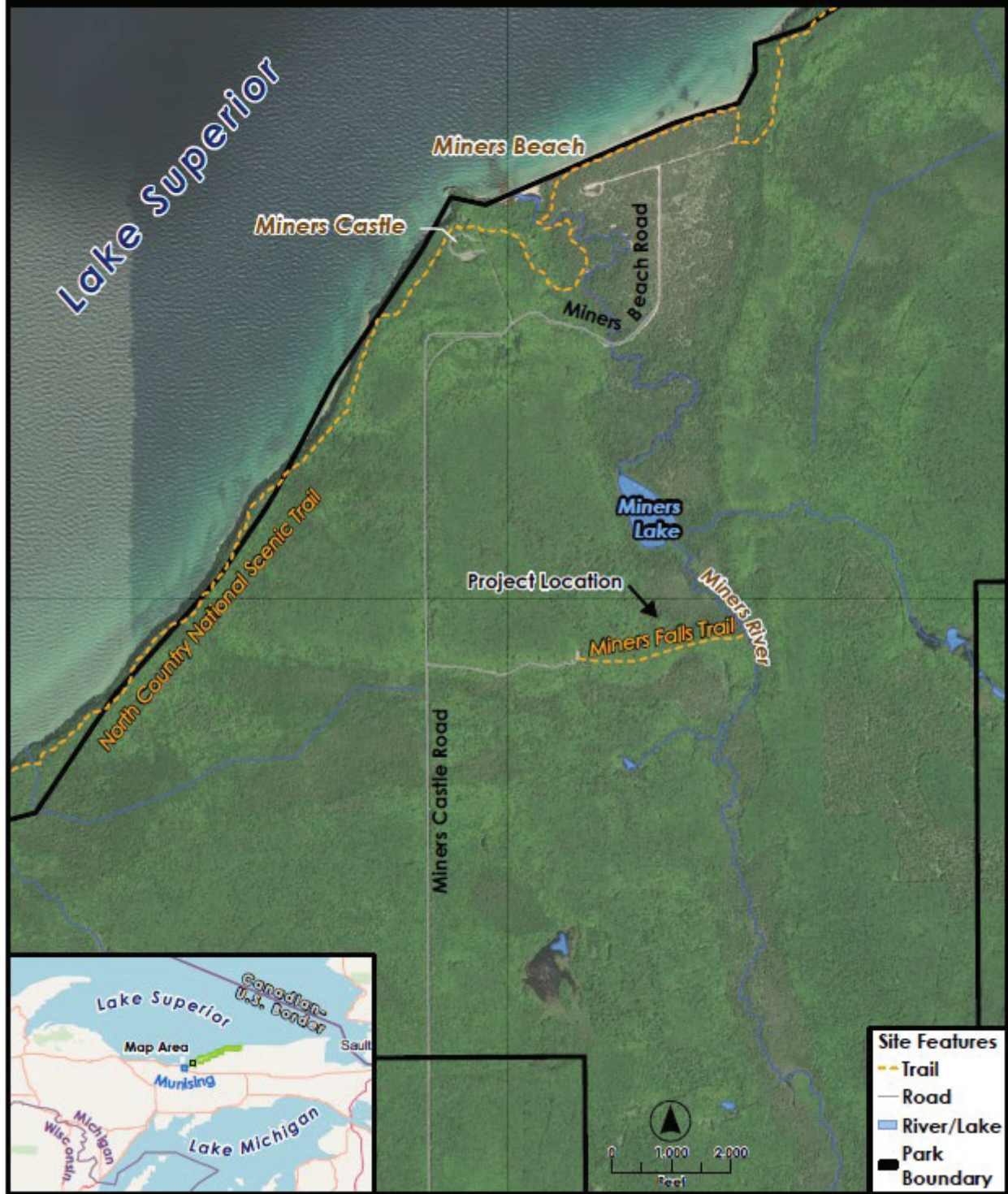


Figure 1 – Project location map.



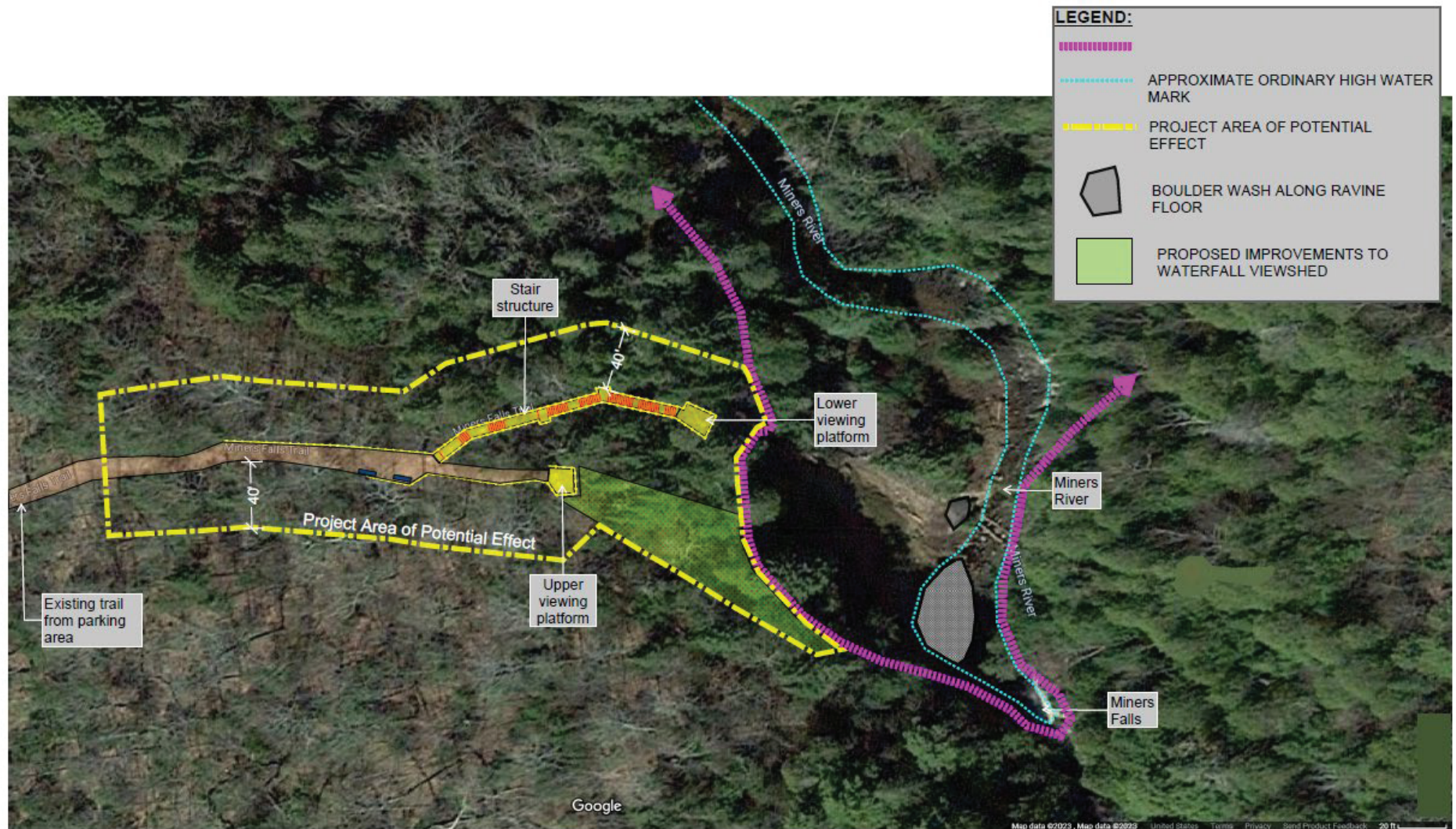


Figure 2 – Undesignated trails leading to valley floor.



Figure 3 – Damage from undesignated trails between lower platform and river.





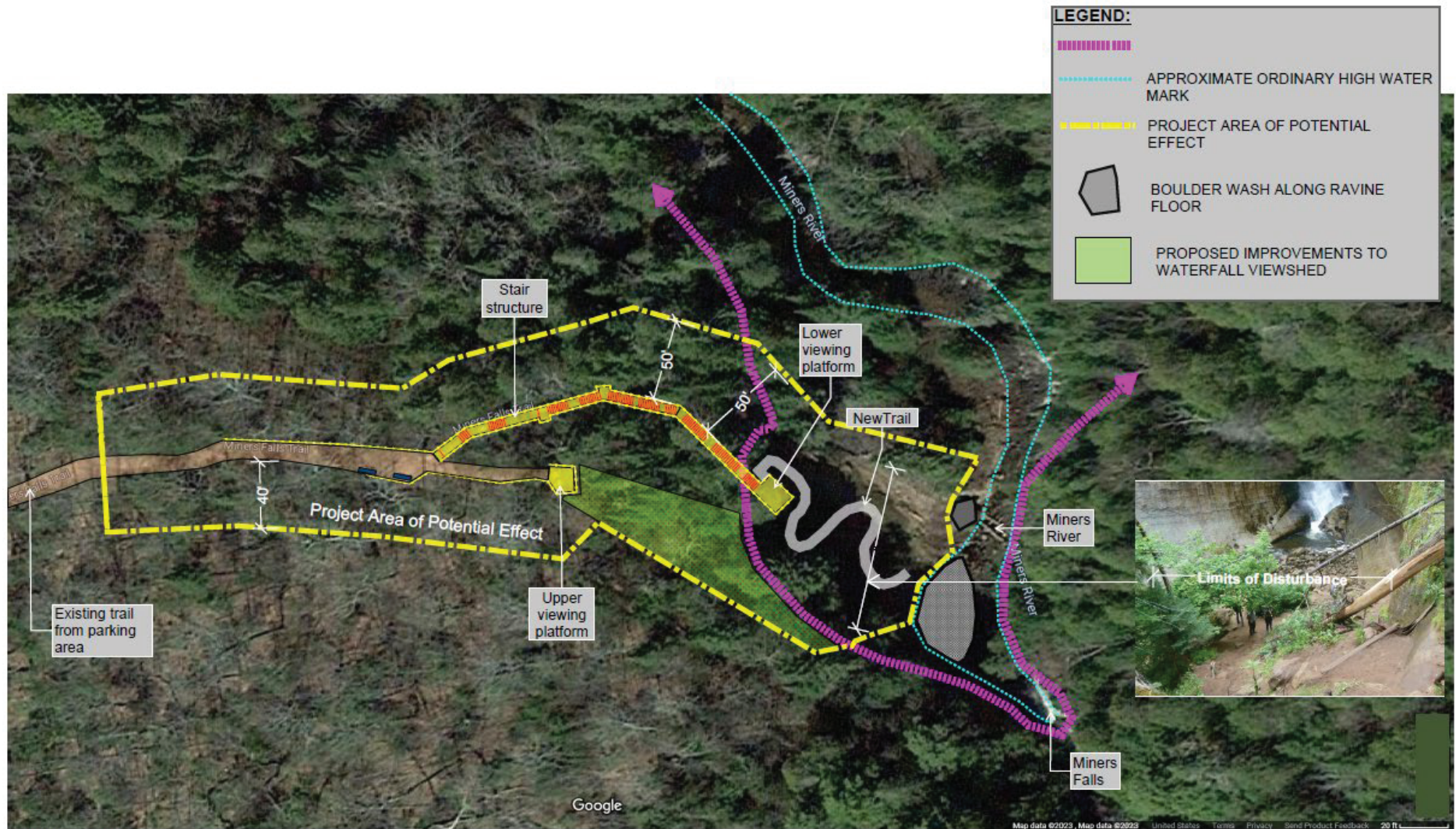
MINERS FALLS STEPS AND OVERLOOK  
No-Action Alternative Exhibit



March 2024

Figure 4. No Action Alternative Schematic





MINERS FALLS STEPS AND OVERLOOK

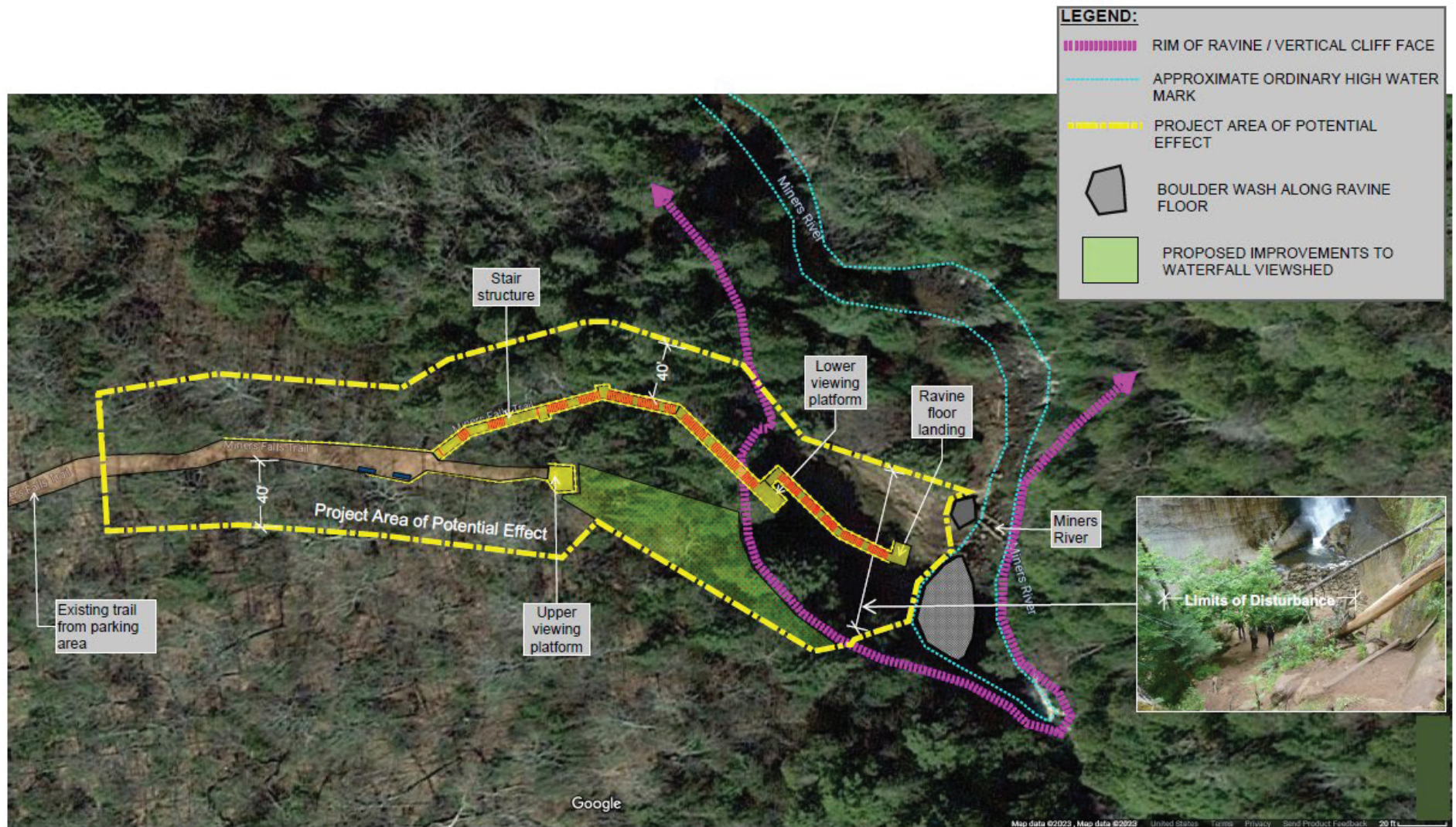
## Action Alternative Exhibit - Extend Steps Further into the Ravine



March 2024

Figure 5. Action Alternative 1





# MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps to base of the Ravine



March 2024

Figure 6. Action Alternative 2



# United States Department of the Interior

NATIONAL PARK SERVICE  
Pictured Rocks National Lakeshore  
P.O. Box 40  
Munising, Michigan 49862

IN REPLY REFER TO: 1.A.2

March 14, 2024

President Whitney Gravelle  
Bay Mills Indian Community of Michigan  
12140 W. Lakeshore Dr.  
Brimley, MI 49715

Re: Preliminary Consultation for Miners Falls Stairs and Steps Project

Dear President Gravelle,

The National Park Service (NPS) is preparing an Environmental Assessment (EA) to support management decisions on a project to rehabilitate the overlook platforms and stair structures at Miners Falls within Pictured Rocks National Lakeshore.

Pictured Rocks National Lakeshore is requesting government to government consultation under 36 CFR 800.3, Section 106 of the National Historic Preservation Act, Executive Order 13175, and Secretarial Order 3403 regarding this project.

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Sincerely,

**DAVID HORNE** Digitally signed by DAVID  
HORNE  
Date: 2024.03.14 13:48:45 -04'00'

David Horne, Superintendent

Enclosures



# Pictured Rocks National Lakeshore

## Miners Falls Viewing Platforms & Steps Rehabilitation Project Location

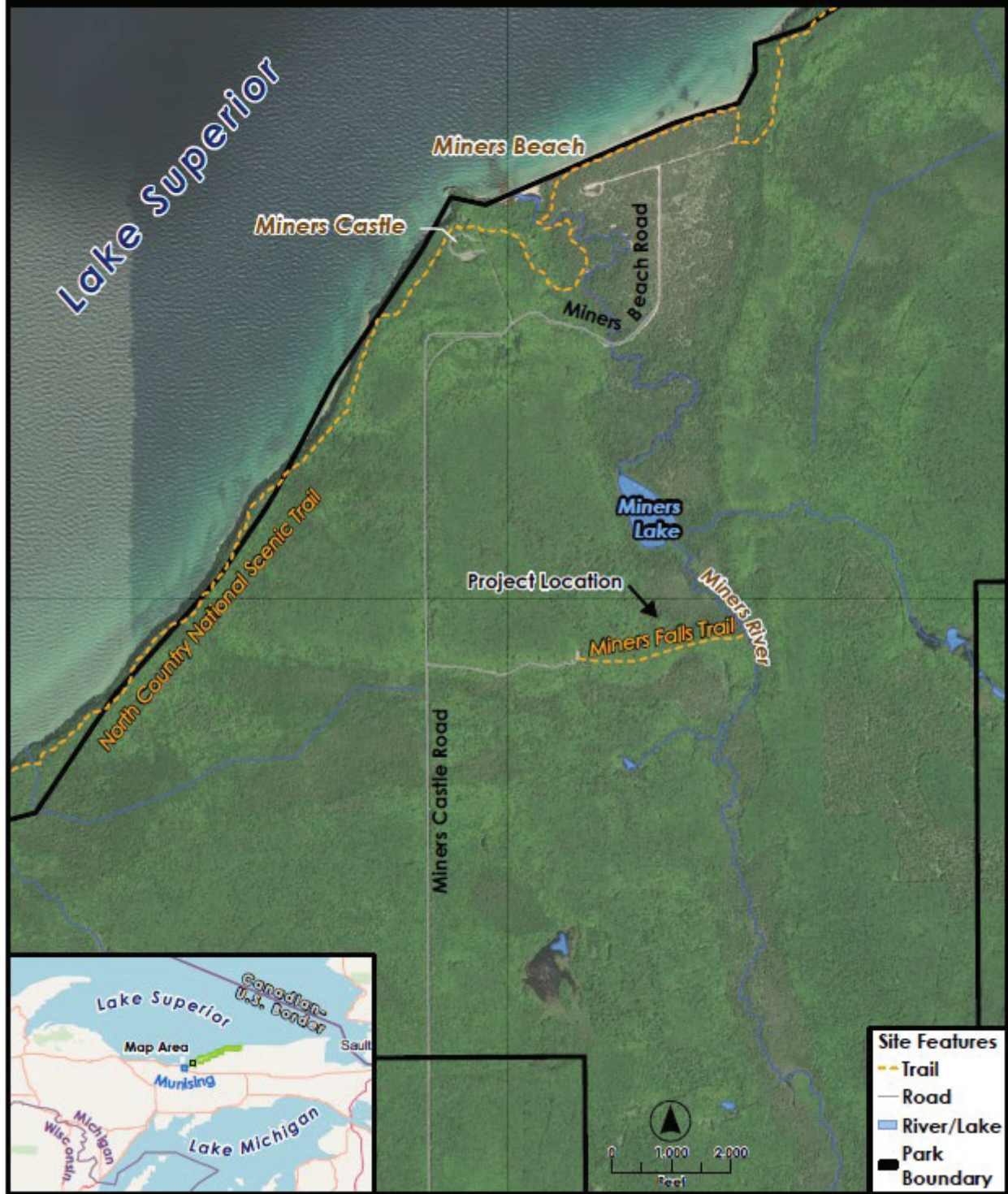


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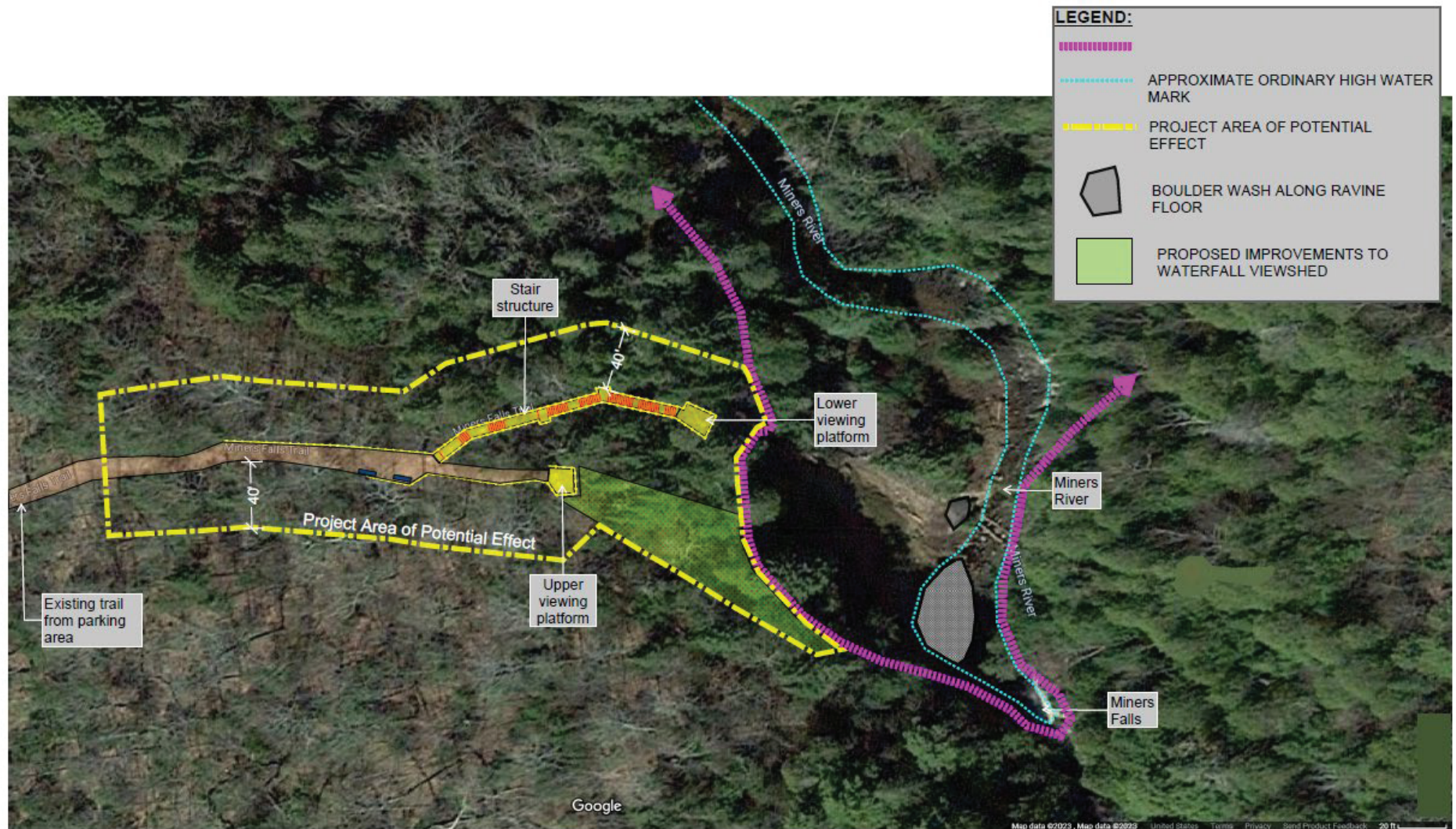


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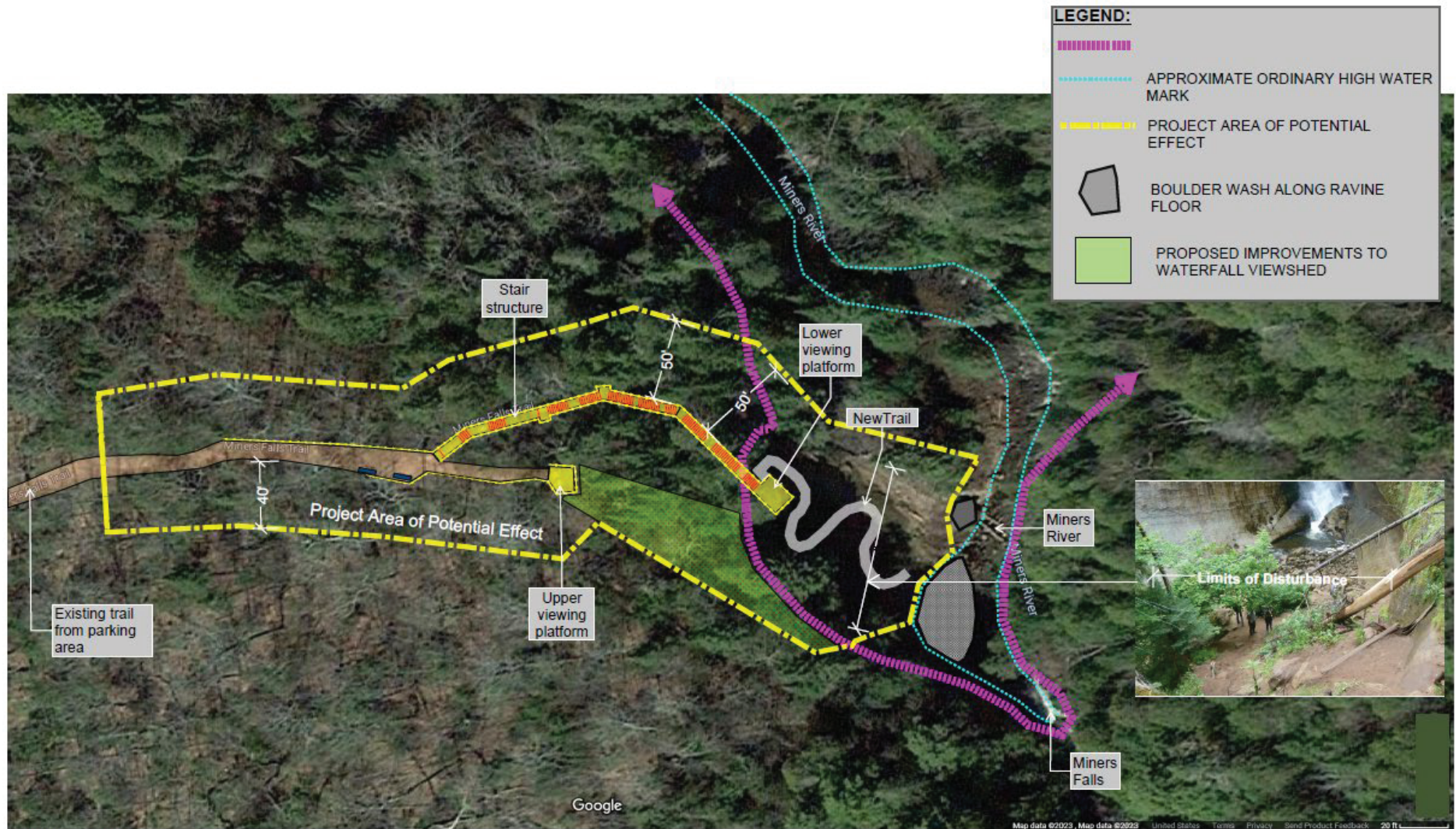
MINERS FALLS STEPS AND OVERLOOK  
No-Action Alternative Exhibit



March 2024

Figure 4. No Action Alternative Schematic





# MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps Further into the Ravine



March 2024

Figure 5. Action Alternative 1





Figure 6. Action Alternative 2



# United States Department of the Interior

NATIONAL PARK SERVICE  
Pictured Rocks National Lakeshore  
P.O. Box 40  
Munising, Michigan 49862

IN REPLY REFER TO: 1.A.2

March 14, 2024

Chairman Kevin DuPuis  
Fond du Lac Band of Lake Superior Chippewa Indians  
1720 Big Lake Rd  
Cloquet, MN 55720

Re: Preliminary Consultation for Miners Falls Stairs and Steps Project

Dear Chairman DuPuis,

The National Park Service (NPS) is preparing an Environmental Assessment (EA) to support management decisions on a project to rehabilitate the overlook platforms and stair structures at Miners Falls within Pictured Rocks National Lakeshore.

Pictured Rocks National Lakeshore is requesting government to government consultation under 36 CFR 800.3, Section 106 of the National Historic Preservation Act, Executive Order 13175, and Secretarial Order 3403 regarding this project.

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As part of the EA process, environmental and cultural impacts are being analyzed. Archeological surveys have been conducted in the area where possible. We welcome any input,



consultation, or guidance you would be willing to provide.

Please contact me at [david\\_horne@nps.gov](mailto:david_horne@nps.gov) or at 906-202-0117 with any questions or comments. If we can provide any additional resources or information, please let us know by April 14, 2024 as we work to complete the environmental assessment process.

Sincerely,

**DAVID HORNE** Digitally signed by DAVID HORNE  
Date: 2024.03.14 13:49:20 -04'00'

David Horne, Superintendent

Enclosures

# Pictured Rocks National Lakeshore

## Miners Falls Viewing Platforms & Steps Rehabilitation Project Location

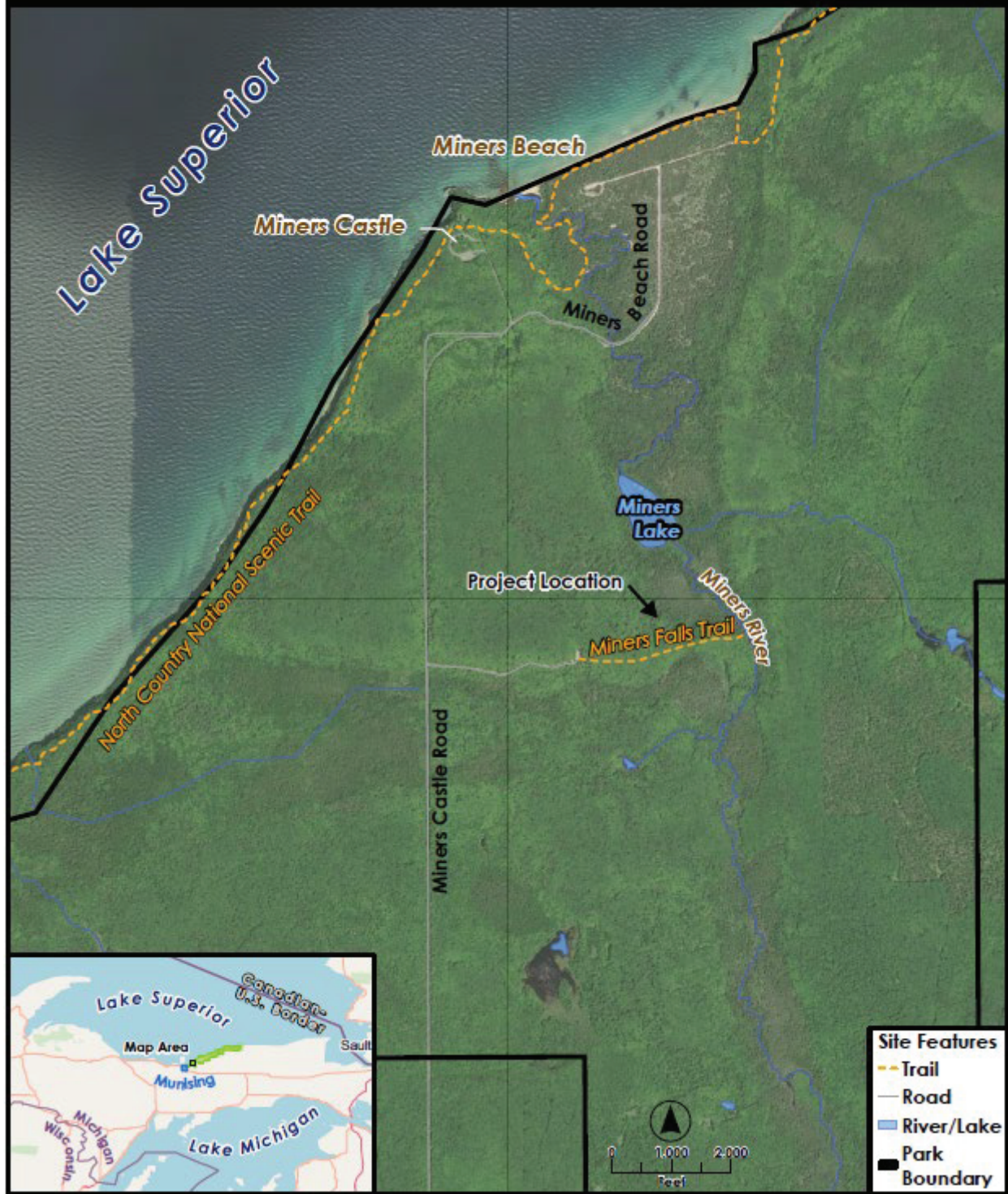


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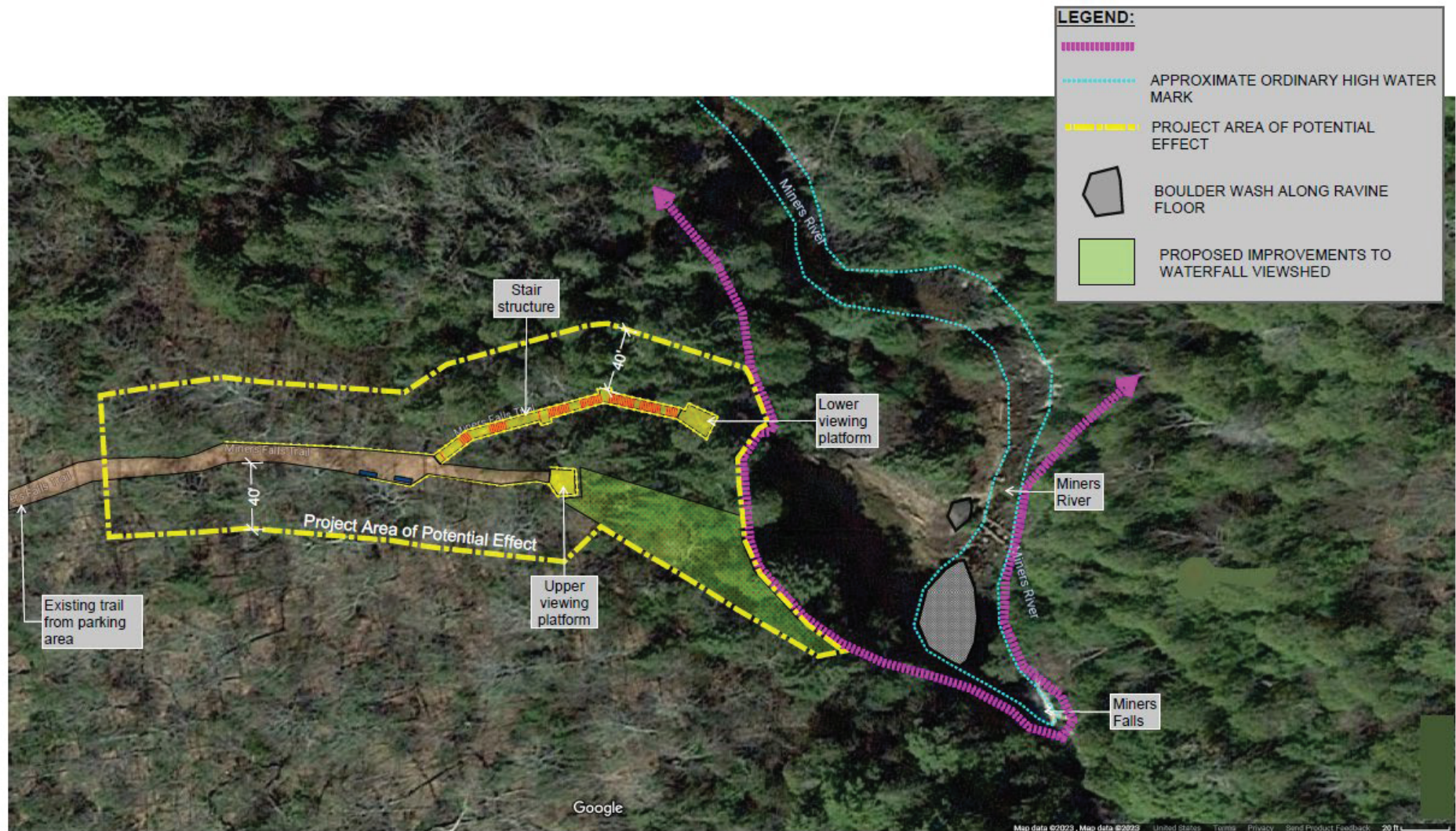


Figure 2 – Undesignated trails leading to valley floor.



Figure 3 – Damage from undesignated trails between lower platform and river.





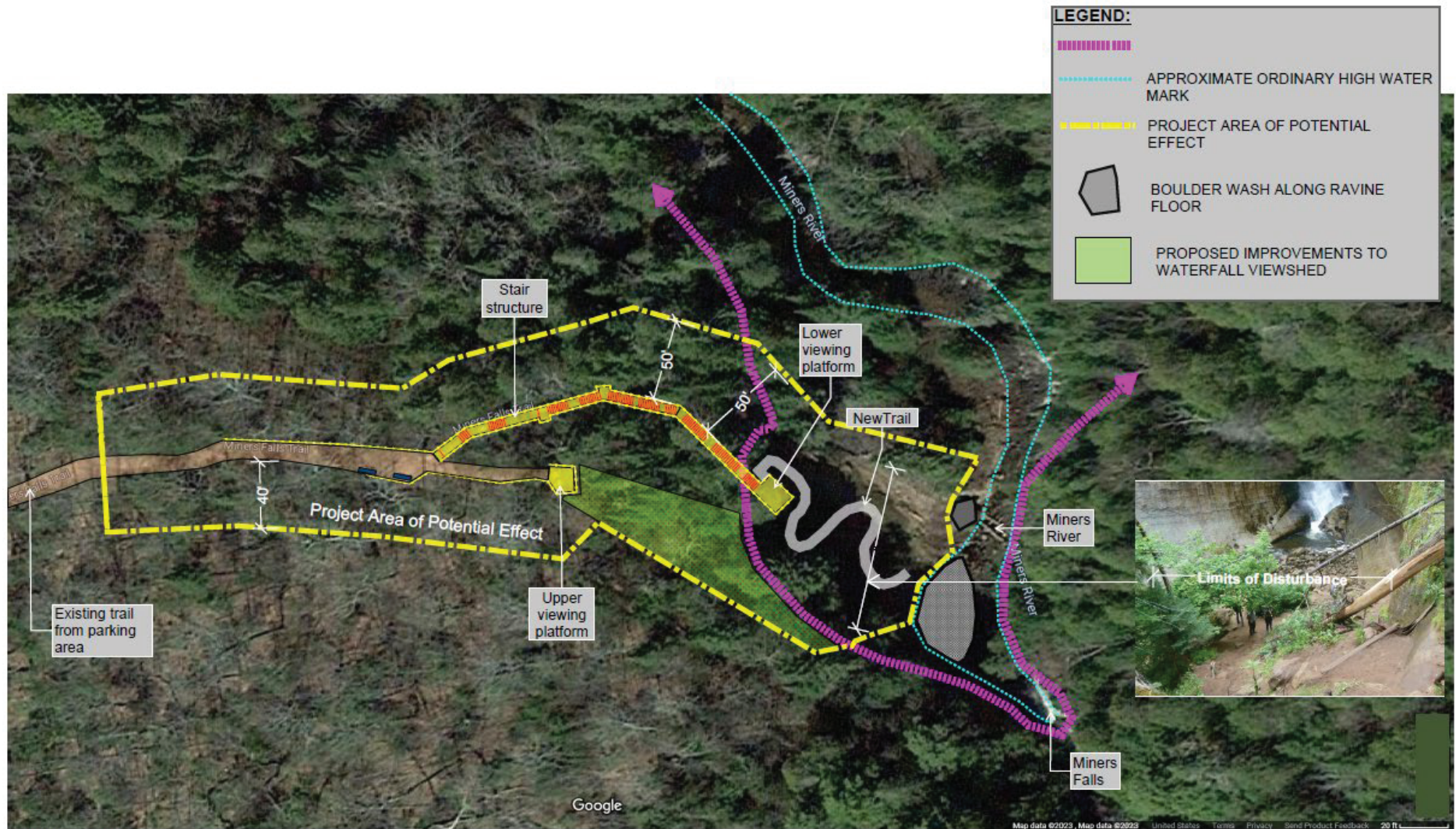
MINERS FALLS STEPS AND OVERLOOK  
No-Action Alternative Exhibit



March 2024

Figure 4. No Action Alternative Schematic





# MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps Further into the Ravine

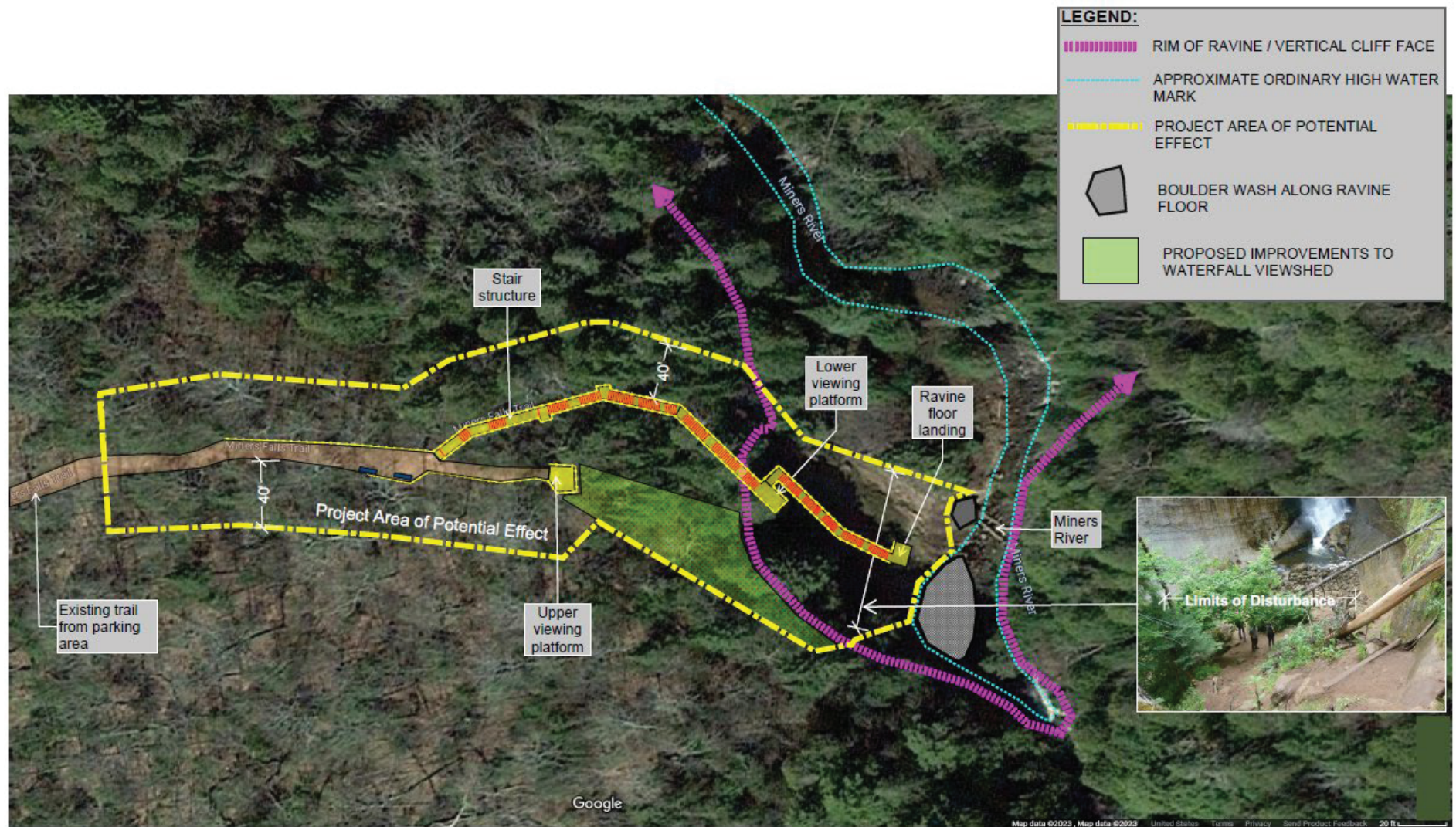


NORTH

March 2024

Figure 5. Action Alternative 1





# MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps to base of the Ravine



NORTH

March 2024

Figure 6. Action Alternative 2



# United States Department of the Interior

NATIONAL PARK SERVICE  
Pictured Rocks National Lakeshore  
P.O. Box 40  
Munising, Michigan 49862

IN REPLY REFER TO: 1.A.2

March 14, 2024

Chair Robert Deschampe  
Grand Portage Band of Lake Superior Chippewa Indians  
PO Box 428  
Grand Portage, MN 55605

Re: Preliminary Consultation for Miners Falls Stairs and Steps Project

Dear Chair Deschampe,

The National Park Service (NPS) is preparing an Environmental Assessment (EA) to support management decisions on a project to rehabilitate the overlook platforms and stair structures at Miners Falls within Pictured Rocks National Lakeshore.

Pictured Rocks National Lakeshore is requesting government to government consultation under 36 CFR 800.3, Section 106 of the National Historic Preservation Act, Executive Order 13175, and Secretarial Order 3403 regarding this project.

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Sincerely,

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HORNE  
Date: 2024.03.14 13:48:09 -04'00'

David Horne, Superintendent

Enclosures



# Pictured Rocks National Lakeshore

## Miners Falls Viewing Platforms & Steps Rehabilitation Project Location

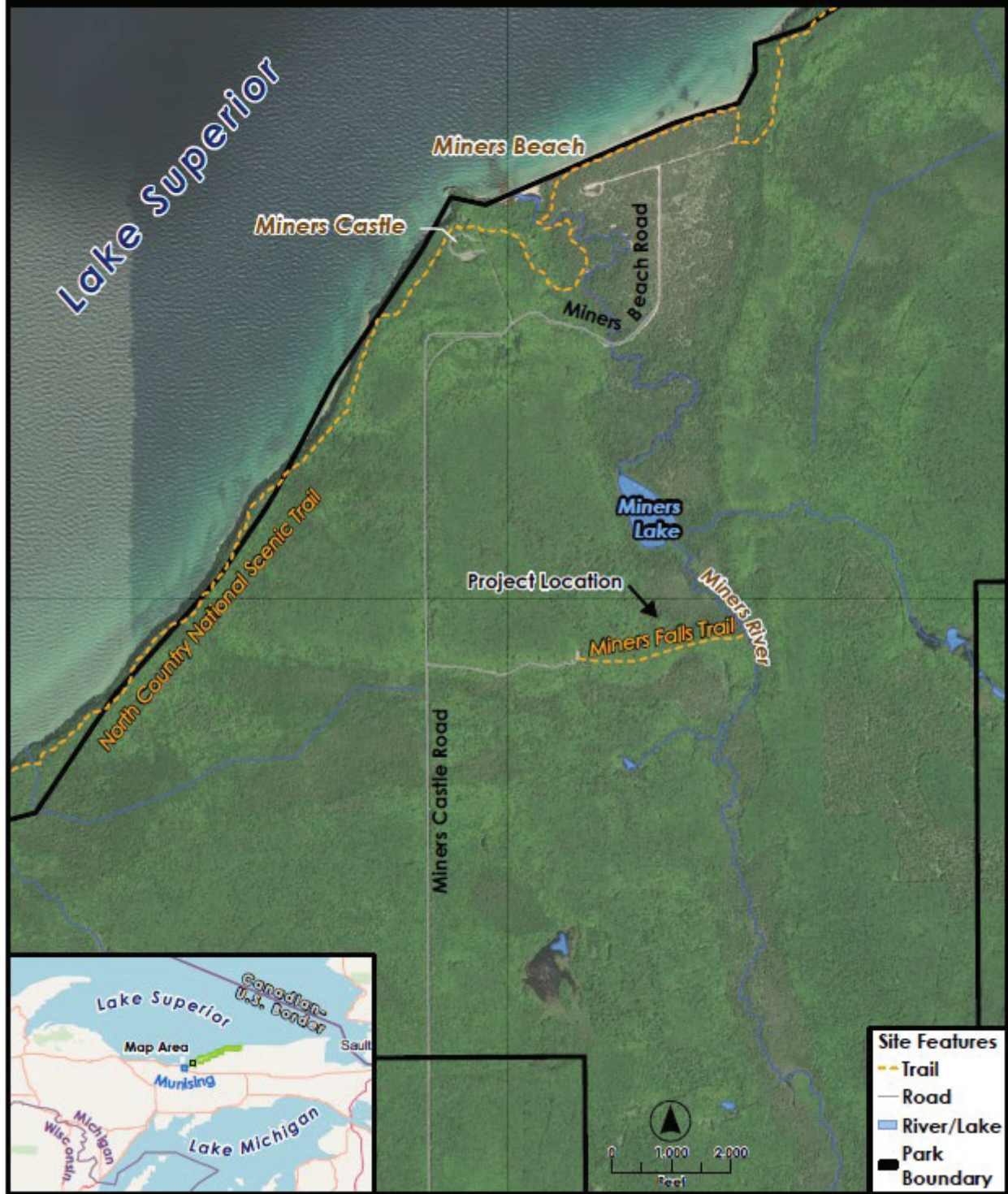


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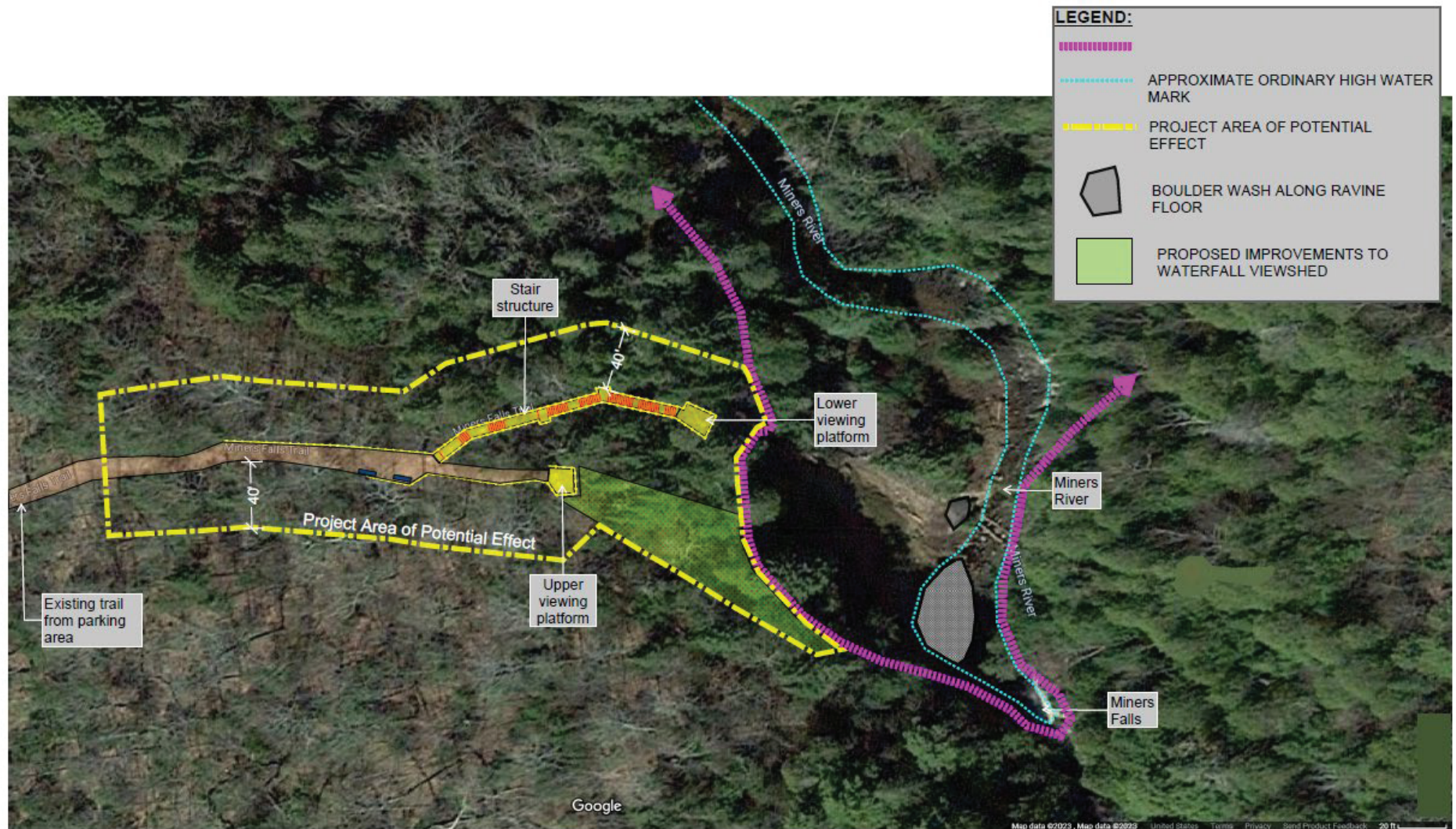


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MINERS FALLS STEPS AND OVERLOOK  
No-Action Alternative Exhibit

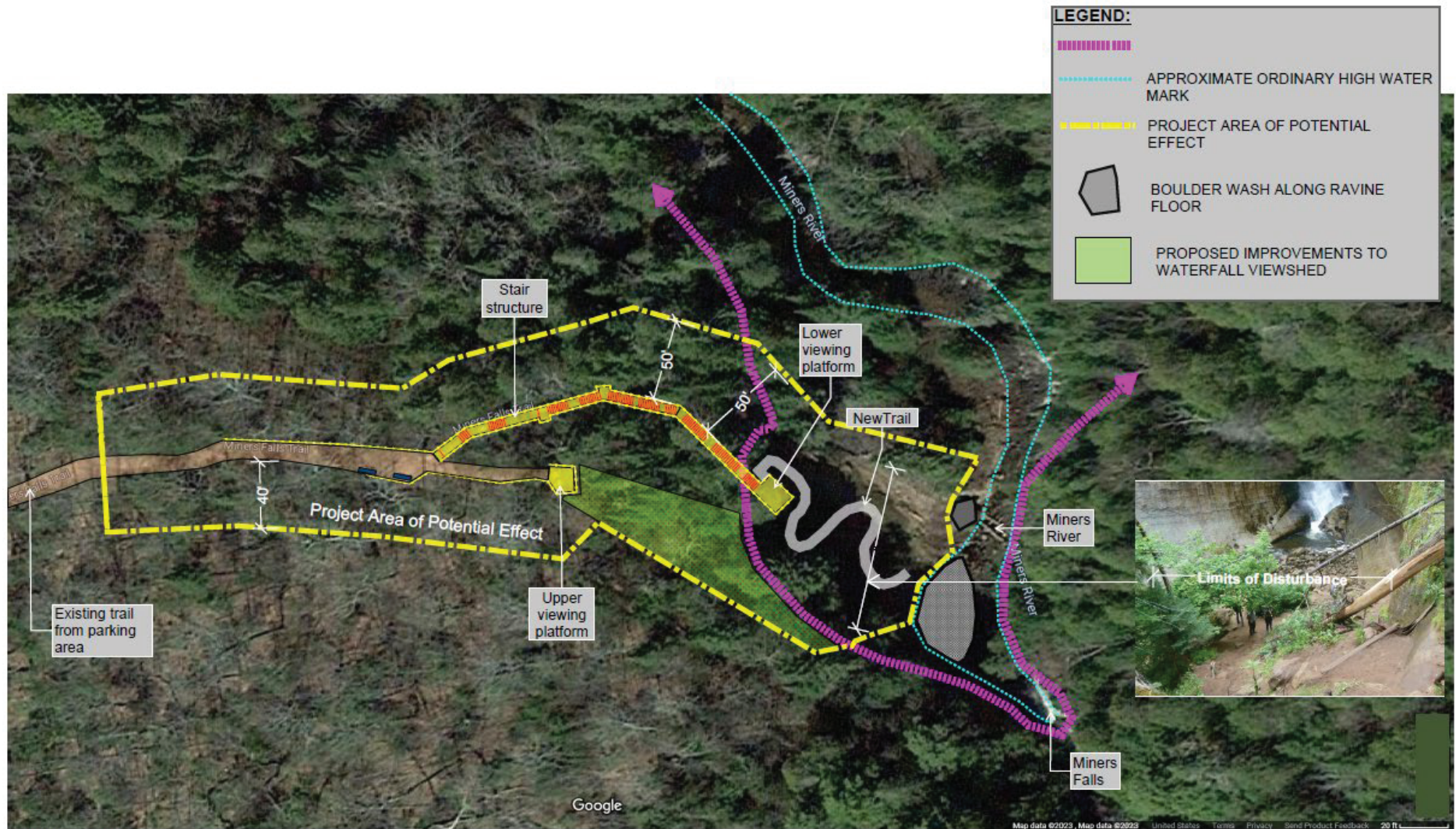


NORTH

March 2024

Figure 4. No Action Alternative Schematic





MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps Further into the Ravine

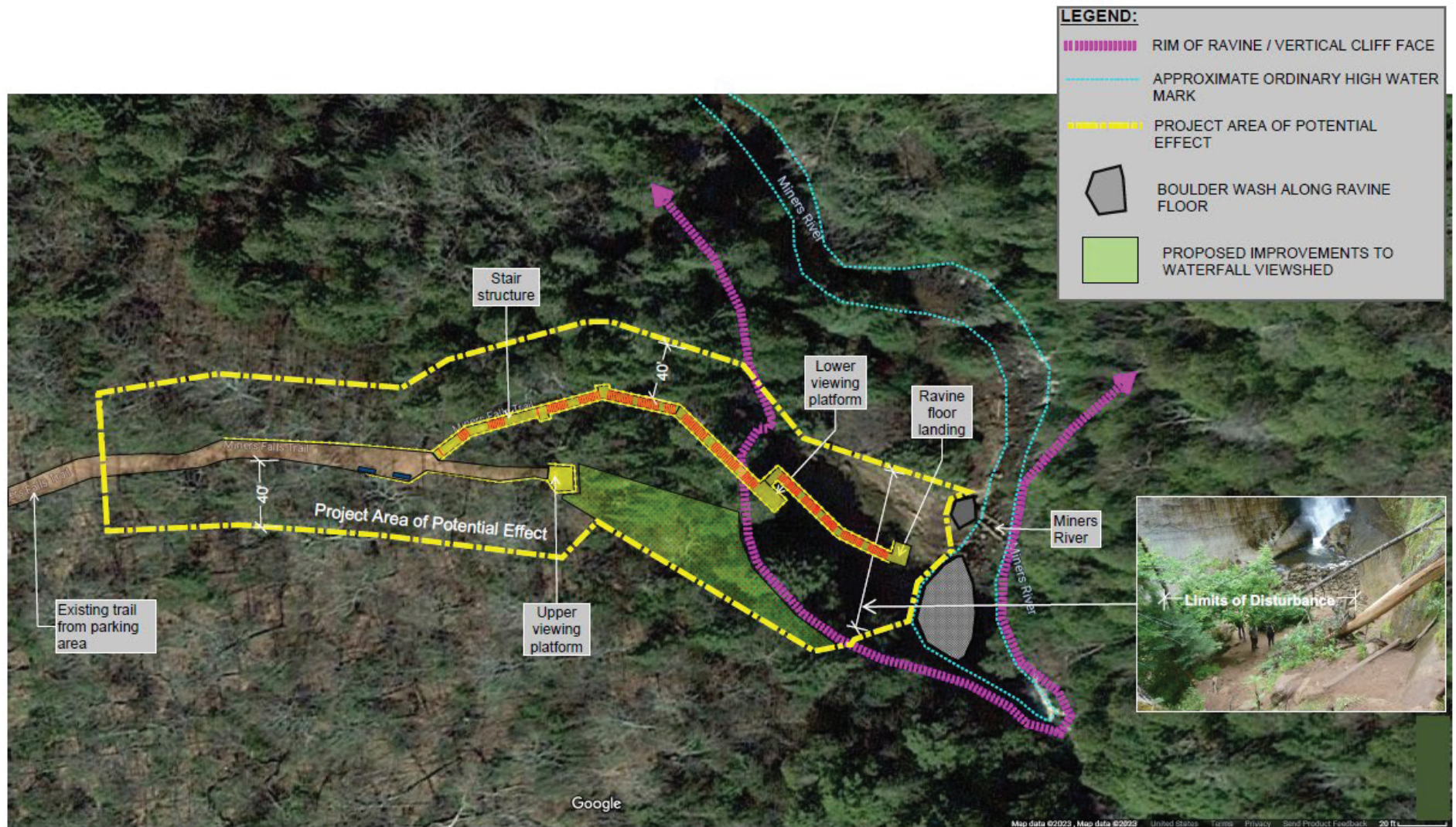


NORTH

March 2024

Figure 5. Action Alternative 1





# MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps to base of the Ravine



March 2024

Figure 6. Action Alternative 2



# United States Department of the Interior

NATIONAL PARK SERVICE  
Pictured Rocks National Lakeshore  
P.O. Box 40  
Munising, Michigan 49862

IN REPLY REFER TO: 1.A.2

March 14, 2024

President Doreen Blaker  
Keweenaw Bay Indian Community  
16429 Beartown Rd  
Baraga, MI 49908

Re: Preliminary Consultation for Miners Falls Stairs and Steps Project

Dear President Blaker,

The National Park Service (NPS) is preparing an Environmental Assessment (EA) to support management decisions on a project to rehabilitate the overlook platforms and stair structures at Miners Falls within Pictured Rocks National Lakeshore.

Pictured Rocks National Lakeshore is requesting government to government consultation under 36 CFR 800.3, Section 106 of the National Historic Preservation Act, Executive Order 13175, and Secretarial Order 3403 regarding this project.

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Sincerely,

**DAVID HORNE** Digitally signed by DAVID HORNE  
Date: 2024.03.14 13:45:49 -04'00'

David Horne, Superintendent

Enclosures



# Pictured Rocks National Lakeshore

## Miners Falls Viewing Platforms & Steps Rehabilitation Project Location

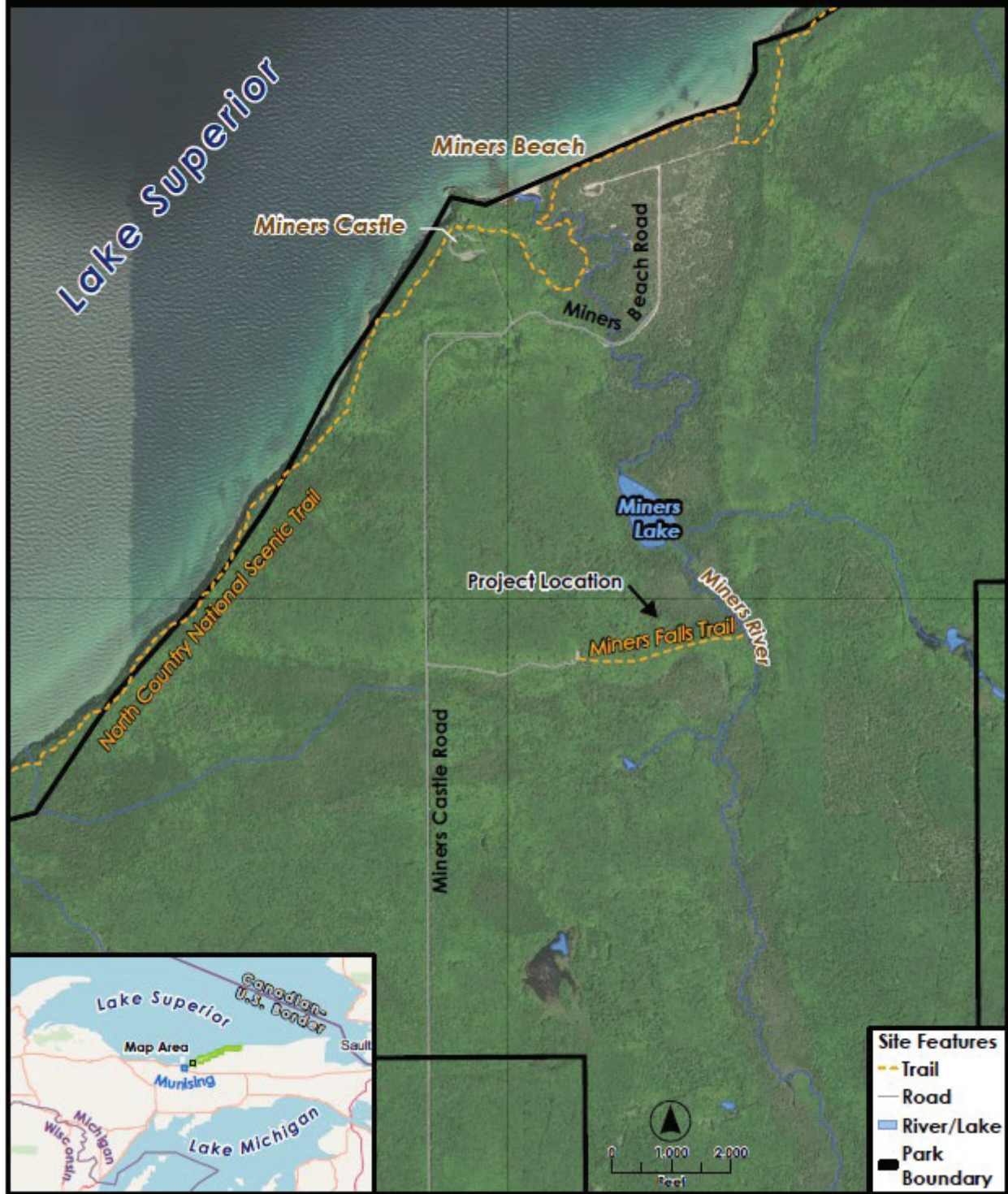


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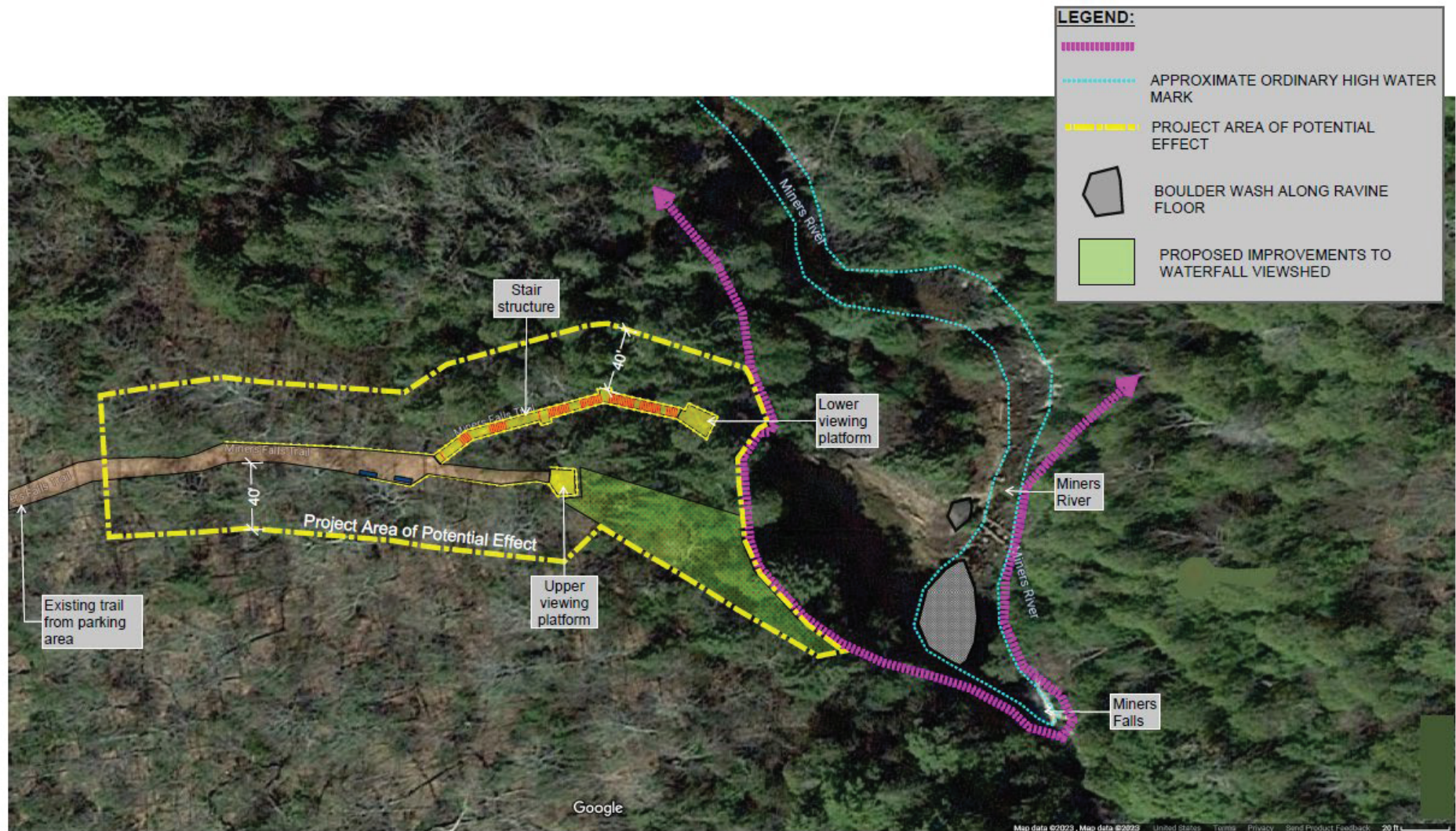


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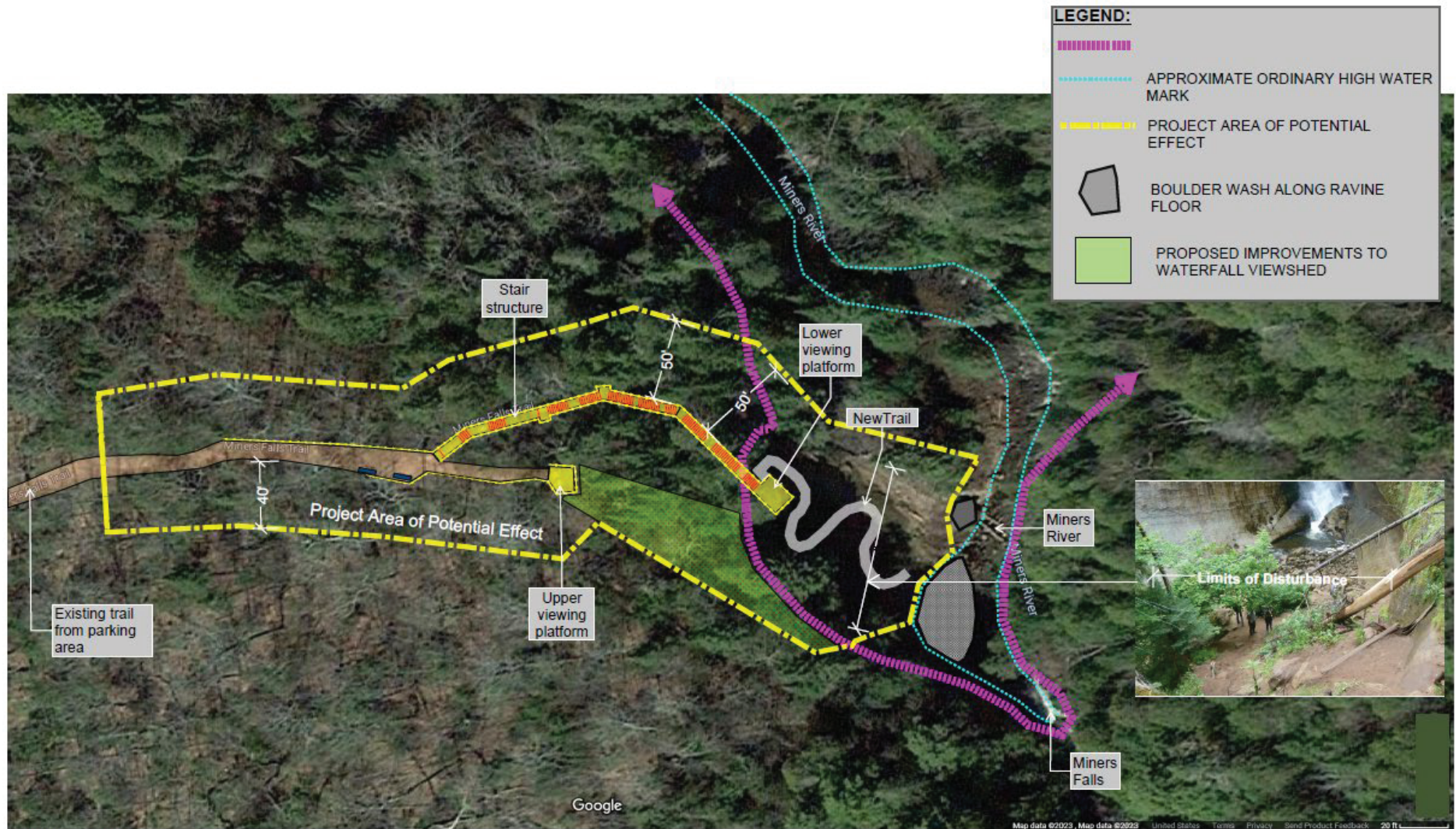
MINERS FALLS STEPS AND OVERLOOK  
No-Action Alternative Exhibit



March 2024

Figure 4. No Action Alternative Schematic





# MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps Further into the Ravine

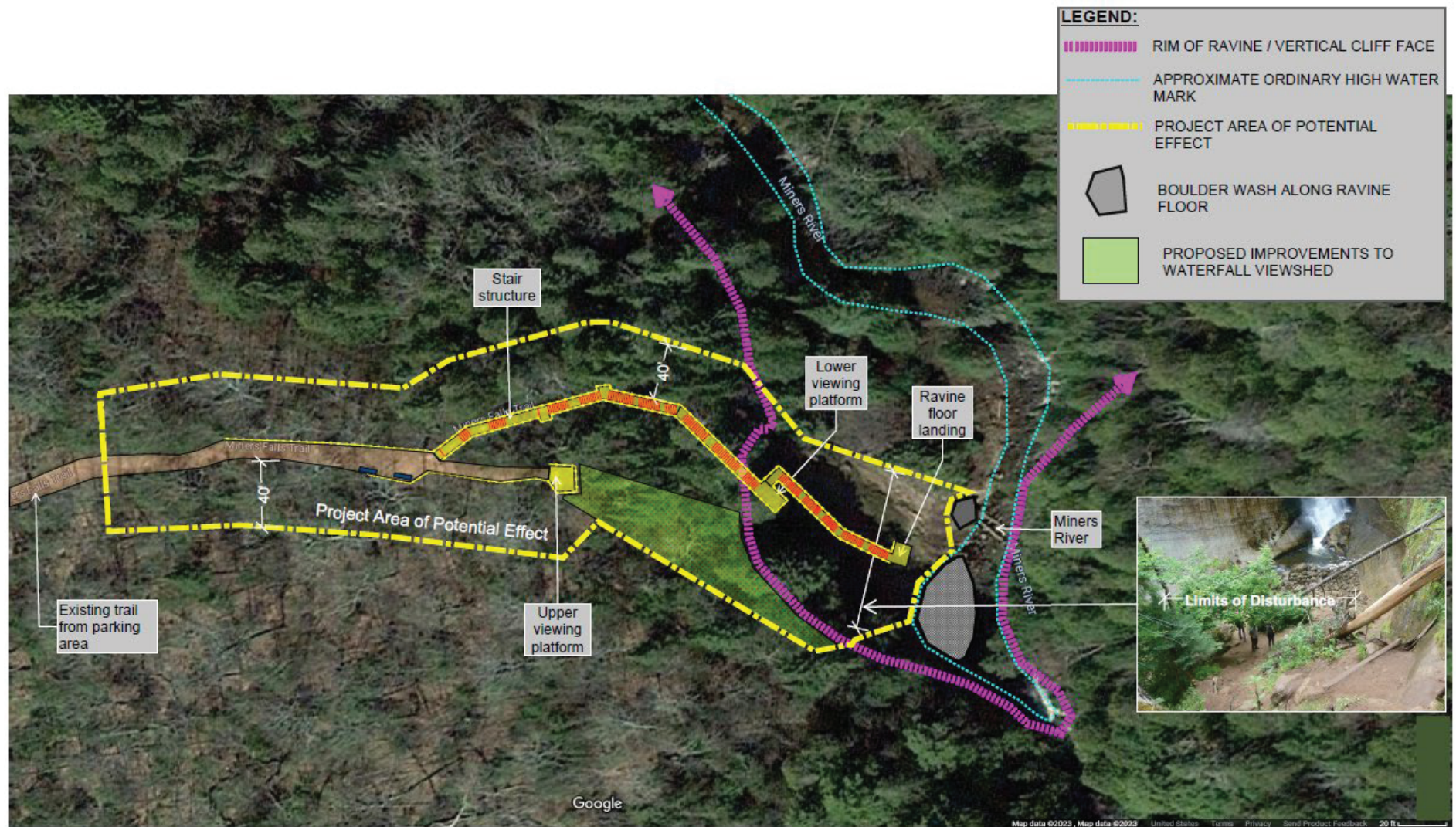


NORTH

March 2024

Figure 5. Action Alternative 1





# MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps to base of the Ravine



March 2024

Figure 6. Action Alternative 2





# United States Department of the Interior

NATIONAL PARK SERVICE  
Pictured Rocks National Lakeshore  
P.O. Box 40  
Munising, Michigan 49862

IN REPLY REFER TO: 1.A.2

March 14, 2024

Chairman Louis Taylor  
Lac Courte Oreilles Band of Lake Superior Chippewa Indians  
13394 W. Trepania Rd  
Haward, WI 54843

Re: Preliminary Consultation for Miners Falls Stairs and Steps Project

Dear Chairman Taylor,

The National Park Service (NPS) is preparing an Environmental Assessment (EA) to support management decisions on a project to rehabilitate the overlook platforms and stair structures at Miners Falls within Pictured Rocks National Lakeshore.

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**DAVID HORNE** Digitally signed by DAVID  
HORNE  
Date: 2024.03.14 13:49:59 -04'00'

David Horne, Superintendent

Enclosures

# Pictured Rocks National Lakeshore

## Miners Falls Viewing Platforms & Steps Rehabilitation Project Location

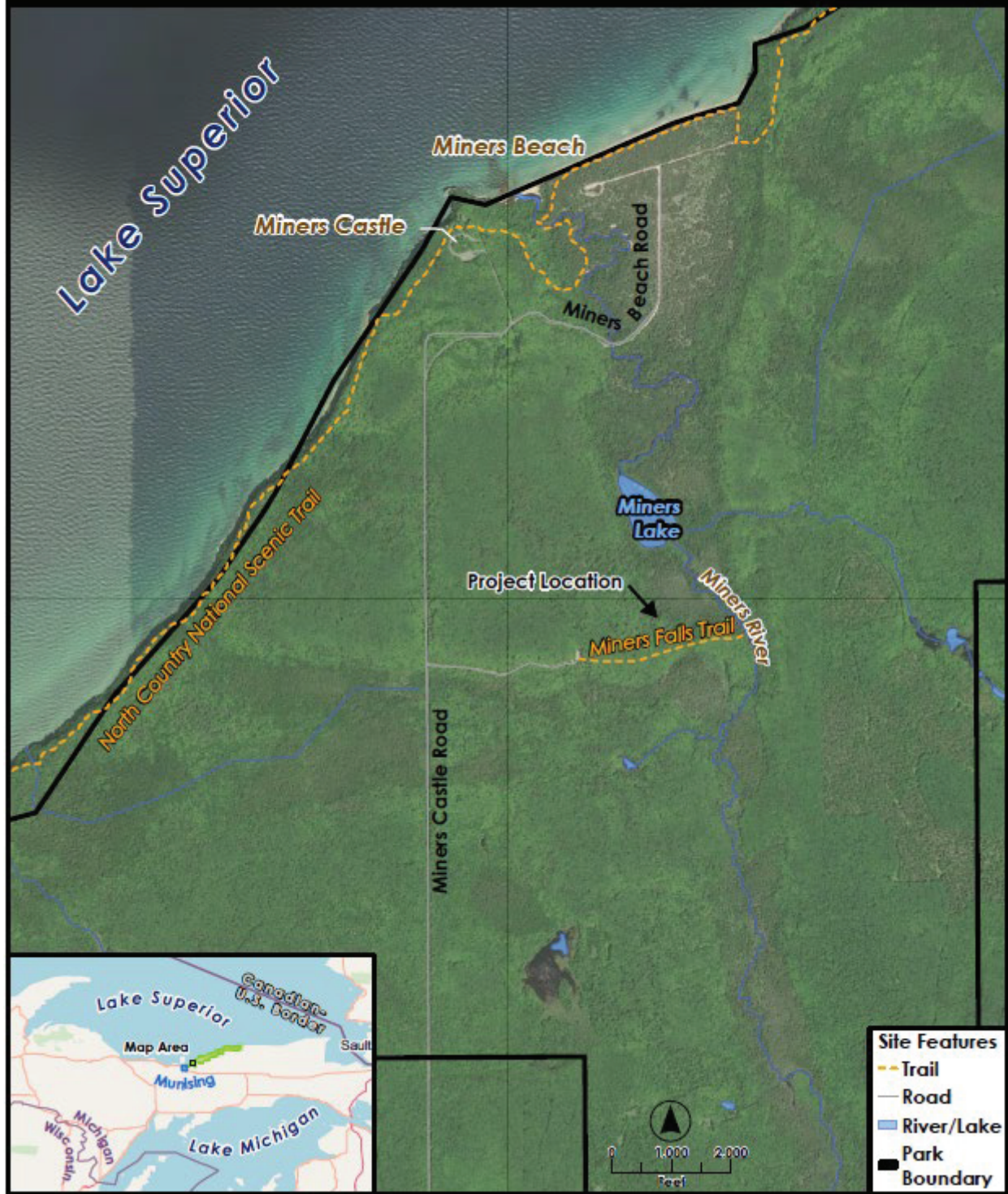


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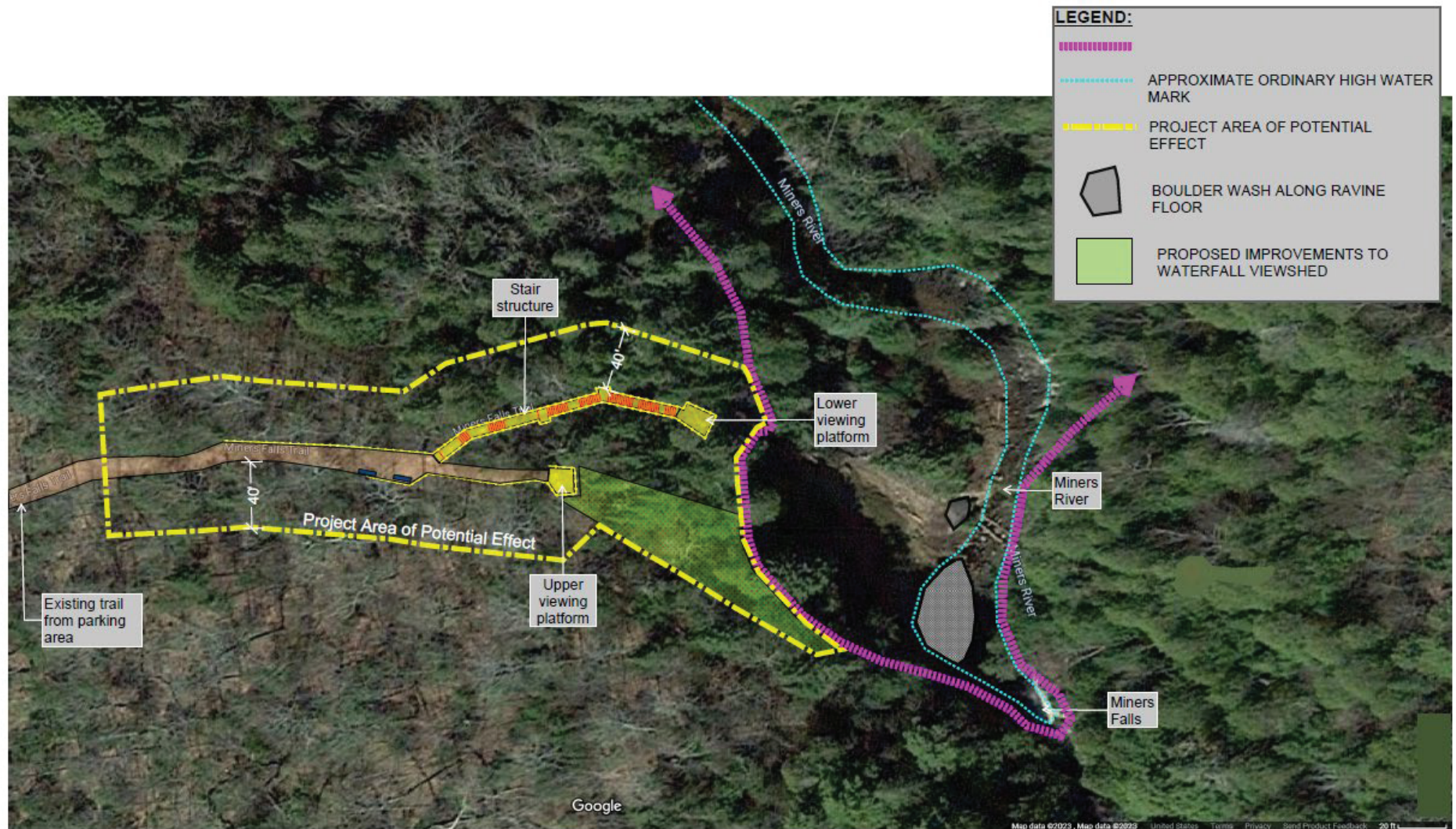


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MINERS FALLS STEPS AND OVERLOOK  
No-Action Alternative Exhibit

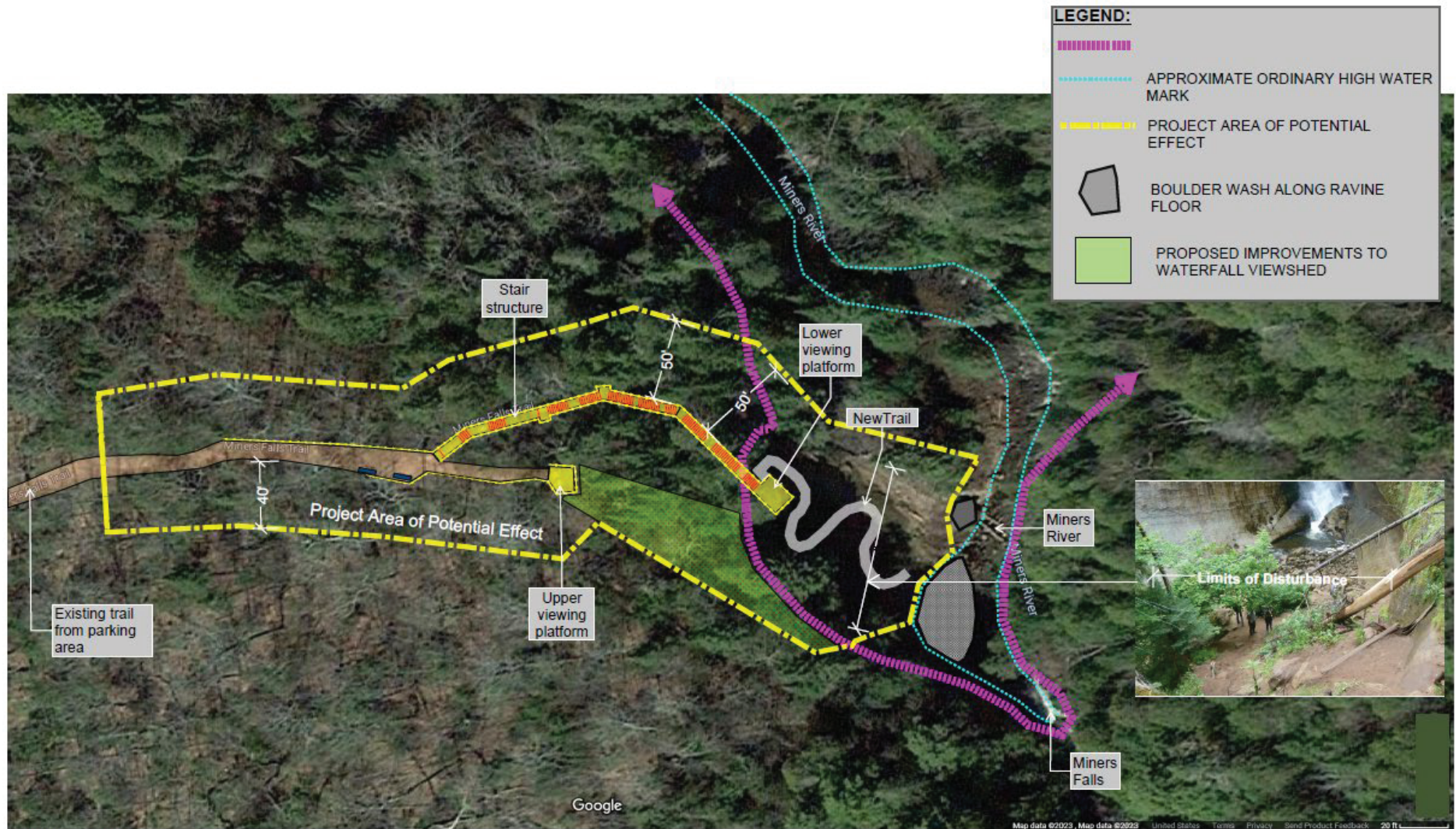


NORTH

March 2024

Figure 4. No Action Alternative Schematic





MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps Further into the Ravine

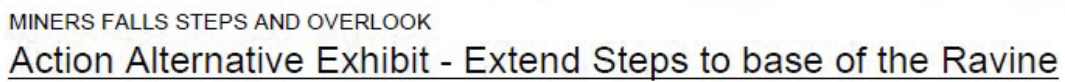


NORTH

March 2024

Figure 5. Action Alternative 1









# United States Department of the Interior

NATIONAL PARK SERVICE  
Pictured Rocks National Lakeshore  
P.O. Box 40  
Munising, Michigan 49862

IN REPLY REFER TO: 1.A.2

March 14, 2024

President John Johnson Sr.  
Lac du Flambeau Band of Lake Superior Chippewa Indians  
PO Box 67  
Lac du Flambeau, WI 54538

Re: Preliminary Consultation for Miners Falls Stairs and Steps Project

Dear President Johnson,

The National Park Service (NPS) is preparing an Environmental Assessment (EA) to support management decisions on a project to rehabilitate the overlook platforms and stair structures at Miners Falls within Pictured Rocks National Lakeshore.

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consultation, or guidance you would be willing to provide.

Please contact me at [david\\_horne@nps.gov](mailto:david_horne@nps.gov) or at 906-202-0117 with any questions or comments. If we can provide any additional resources or information, please let us know by April 14, 2024 as we work to complete the environmental assessment process.

Sincerely,

**DAVID HORNE** Digitally signed by DAVID HORNE  
Date: 2024.03.14 13:46:59 -04'00'

David Horne, Superintendent

Enclosures

# Pictured Rocks National Lakeshore

## Miners Falls Viewing Platforms & Steps Rehabilitation Project Location

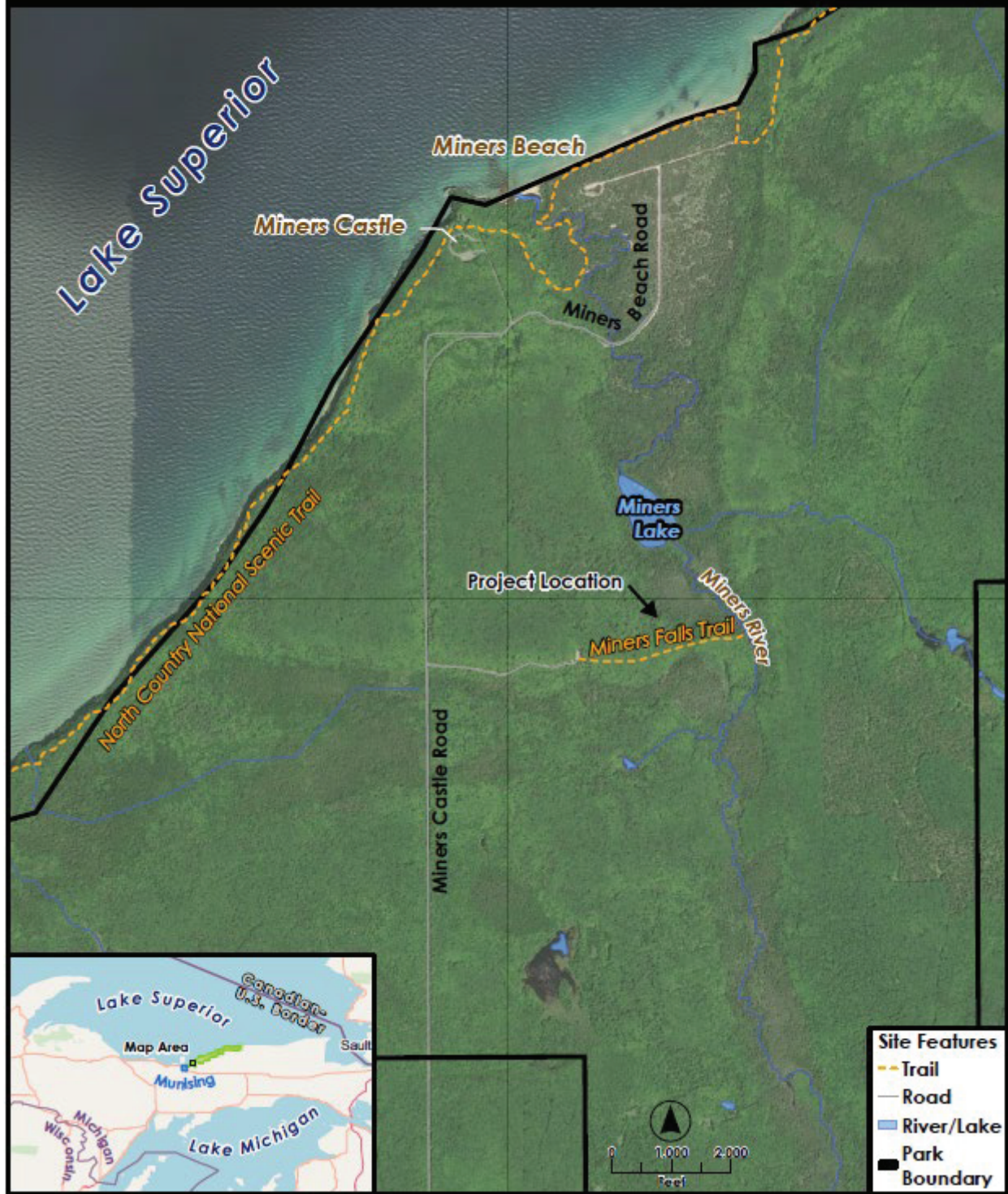


Figure 1 – Project location map.



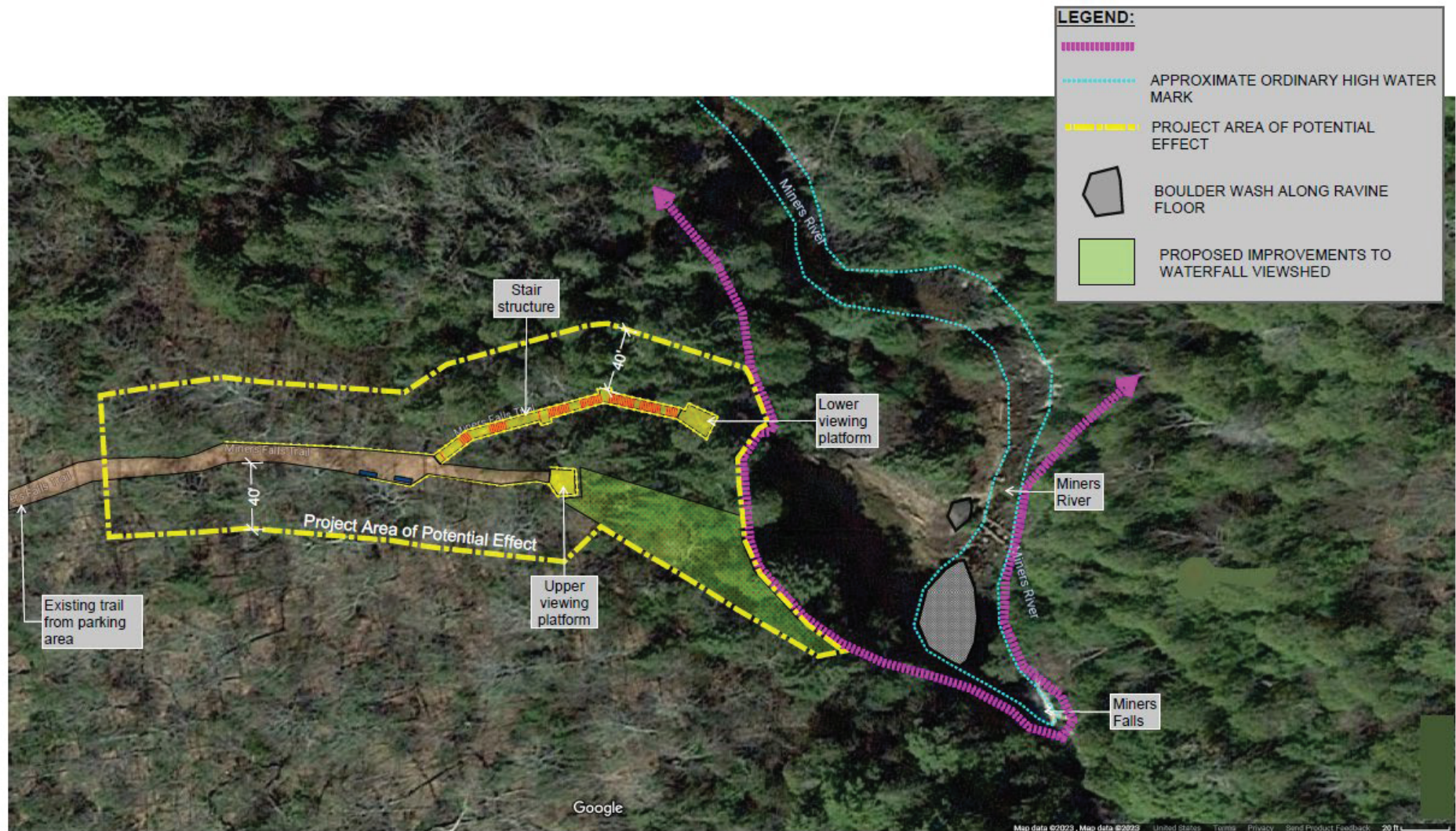


Figure 2 – Undesignated trails leading to valley floor.



Figure 3 – Damage from undesignated trails between lower platform and river.





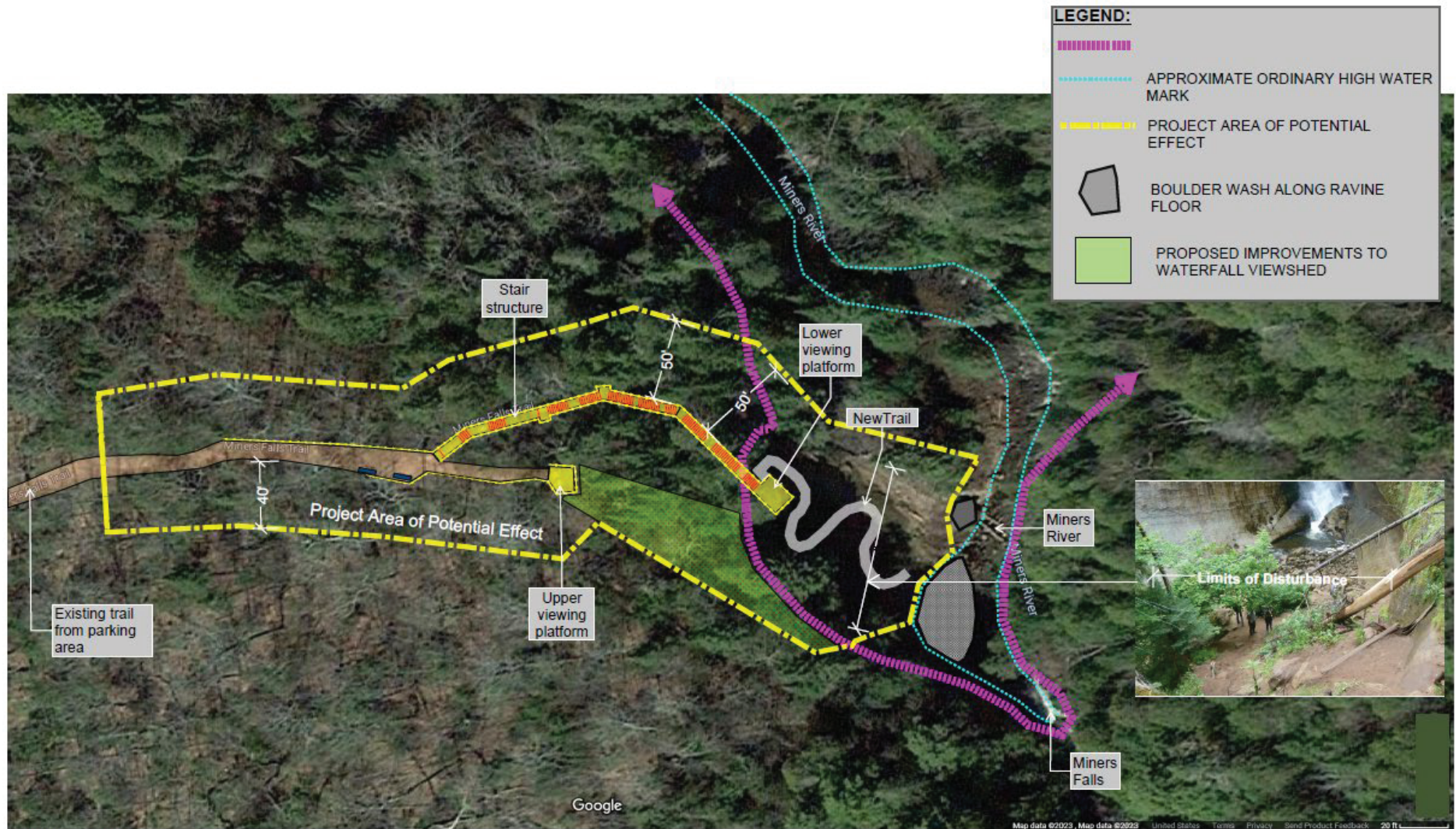
MINERS FALLS STEPS AND OVERLOOK  
No-Action Alternative Exhibit



March 2024

Figure 4. No Action Alternative Schematic





# MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps Further into the Ravine

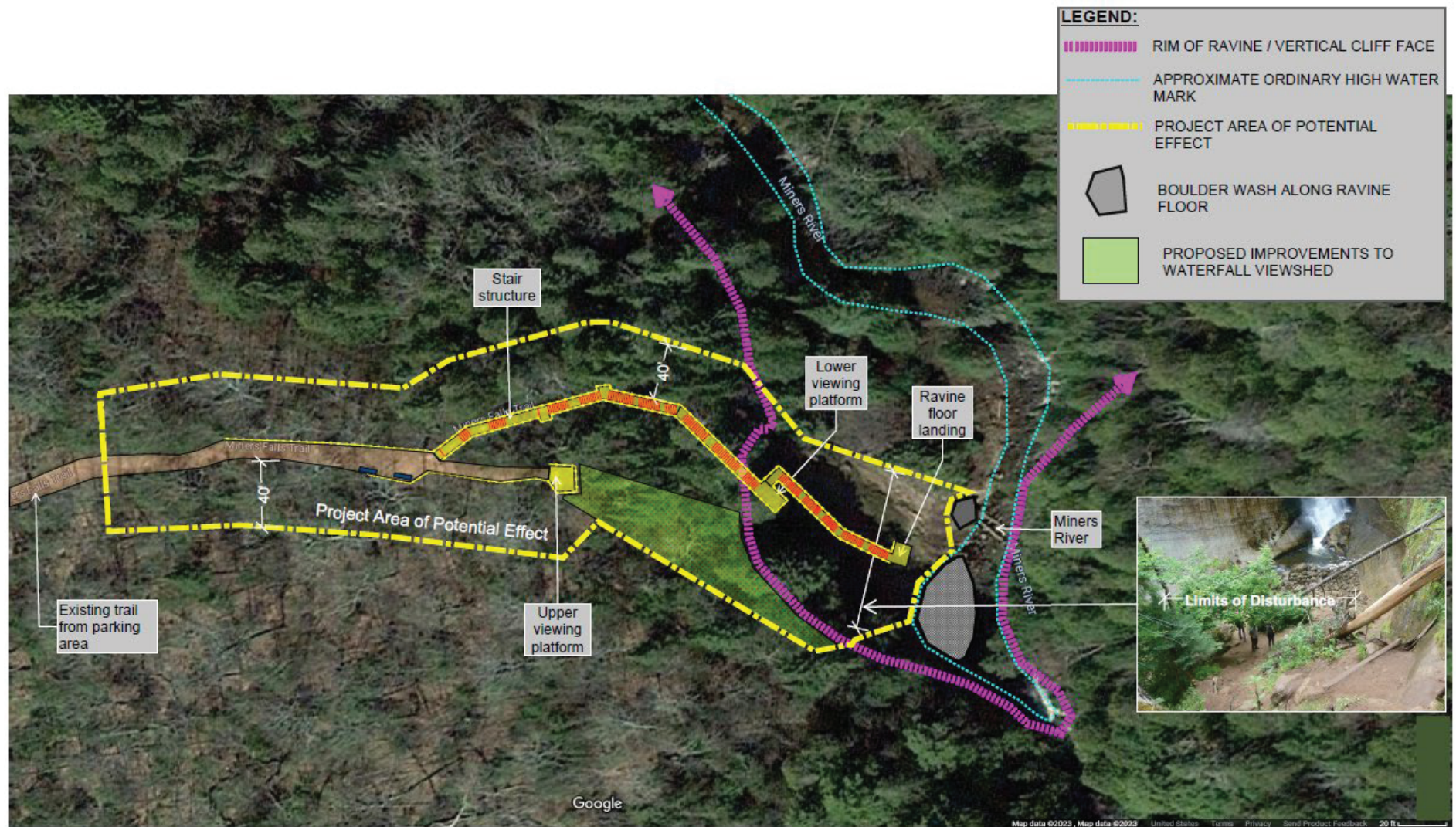


NORTH

March 2024

Figure 5. Action Alternative 1





MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps to base of the Ravine



NORTH

March 2024

Figure 6. Action Alternative 2



# United States Department of the Interior

NATIONAL PARK SERVICE  
Pictured Rocks National Lakeshore  
P.O. Box 40  
Munising, Michigan 49862

IN REPLY REFER TO: 1.A.2

March 14, 2024

Chair James Williams Jr.  
Lac Vieux Desert Band of Lake Superior Chippewa Indians  
PO Box 249  
Watersmeet, MI 49969

Re: Preliminary Consultation for Miners Falls Stairs and Steps Project

Dear Chair Williams,

The National Park Service (NPS) is preparing an Environmental Assessment (EA) to support management decisions on a project to rehabilitate the overlook platforms and stair structures at Miners Falls within Pictured Rocks National Lakeshore.

Pictured Rocks National Lakeshore is requesting government to government consultation under 36 CFR 800.3, Section 106 of the National Historic Preservation Act, Executive Order 13175, and Secretarial Order 3403 regarding this project.

The purpose of the proposed Miners Falls project is to provide safe public access to the Miners River and the base of Miners Falls, while reducing impacts to the natural environment. The need for action at this time is that the current infrastructure is deteriorating and in need of replacement. Additionally, public demand for access to the river has created undesignated trails which are causing erosion and damage to the vegetation.

Three alternatives are being considered. The “no action alternative” would replace existing infrastructure in kind with no access to the river or base of the falls. Action Alternative 1 would replace existing infrastructure in a similar design with a rustic-style trail diverting from the built infrastructure to allow access to the river and base of falls. Action Alternative 2 would replace existing infrastructure in a similar design with a stair structure to the river and access to the base of the falls. Please find attached additional background information, including maps, photos, and alternative schematics.

As part of the EA process, environmental and cultural impacts are being analyzed. Archeological surveys have been conducted in the area where possible. We welcome any input,

consultation, or guidance you would be willing to provide.

Please contact me at [david\\_horne@nps.gov](mailto:david_horne@nps.gov) or at 906-202-0117 with any questions or comments. If we can provide any additional resources or information, please let us know by April 14, 2024 as we work to complete the environmental assessment process.

Sincerely,

**DAVID HORNE** Digitally signed by DAVID HORNE  
Date: 2024.03.14 13:47:33 -04'00'

David Horne, Superintendent

Enclosures



# Pictured Rocks National Lakeshore

## Miners Falls Viewing Platforms & Steps Rehabilitation Project Location

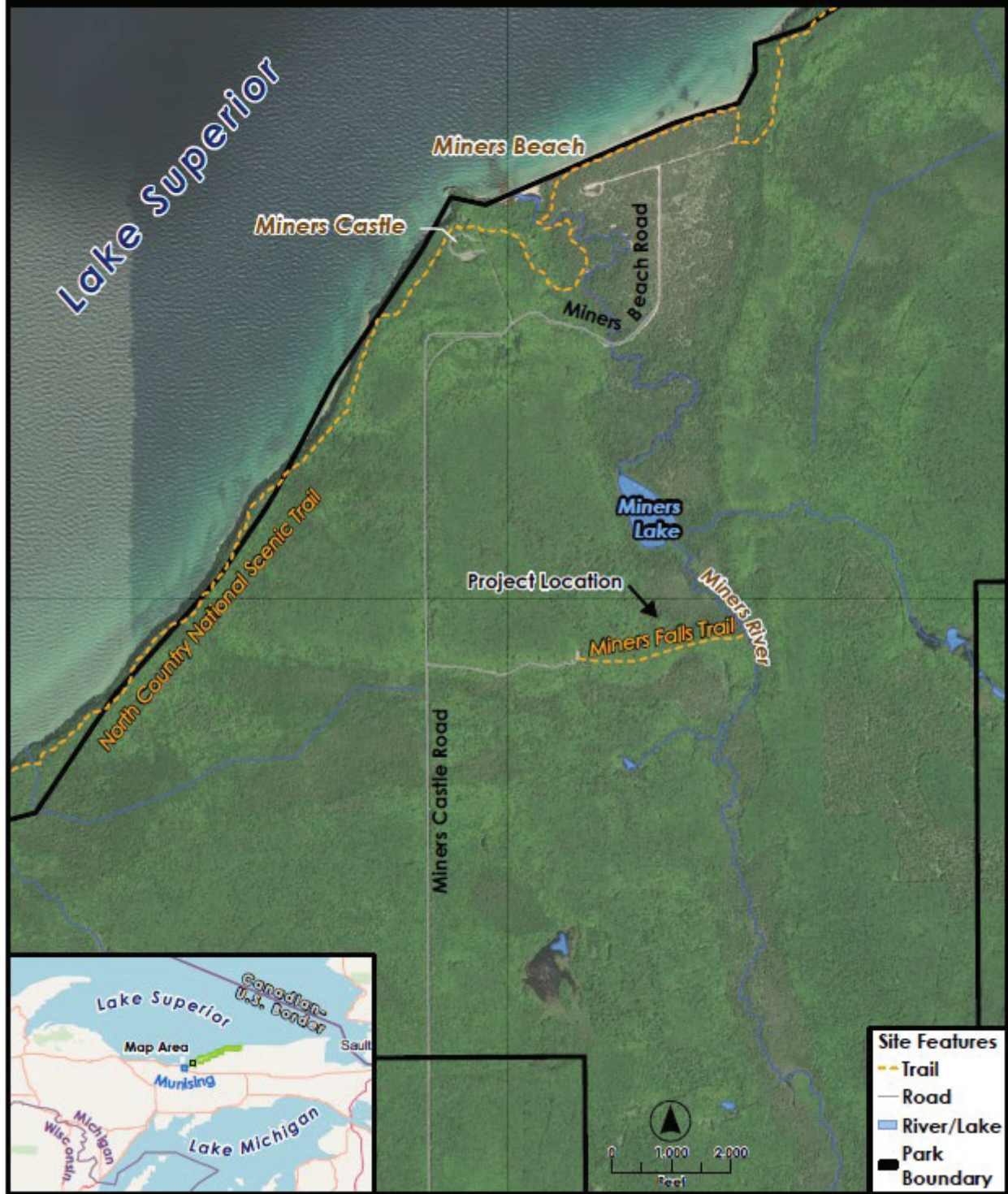


Figure 1 – Project location map.



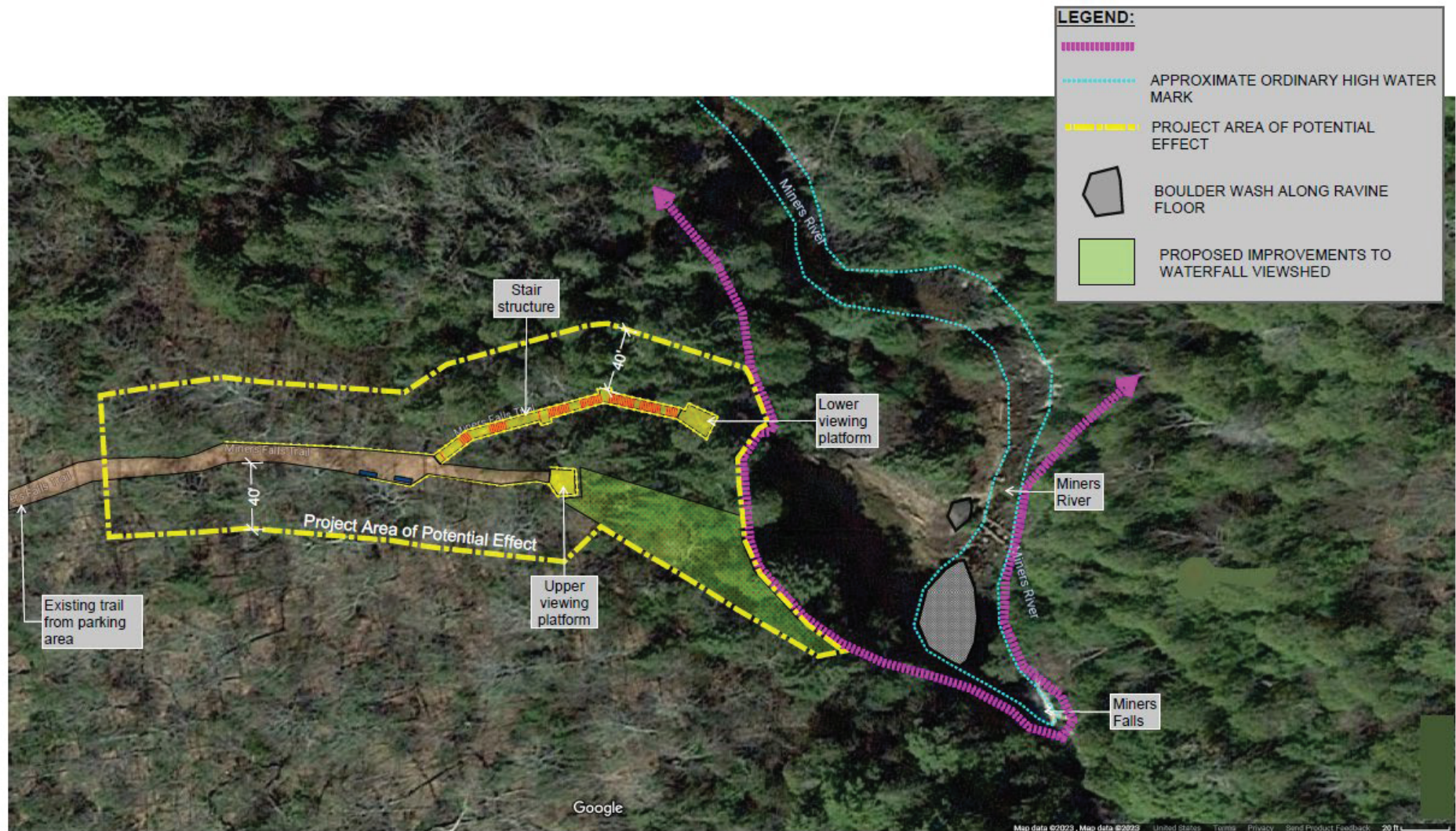


Figure 2 – Undesignated trails leading to valley floor.



Figure 3 – Damage from undesignated trails between lower platform and river.





MINERS FALLS STEPS AND OVERLOOK  
No-Action Alternative Exhibit

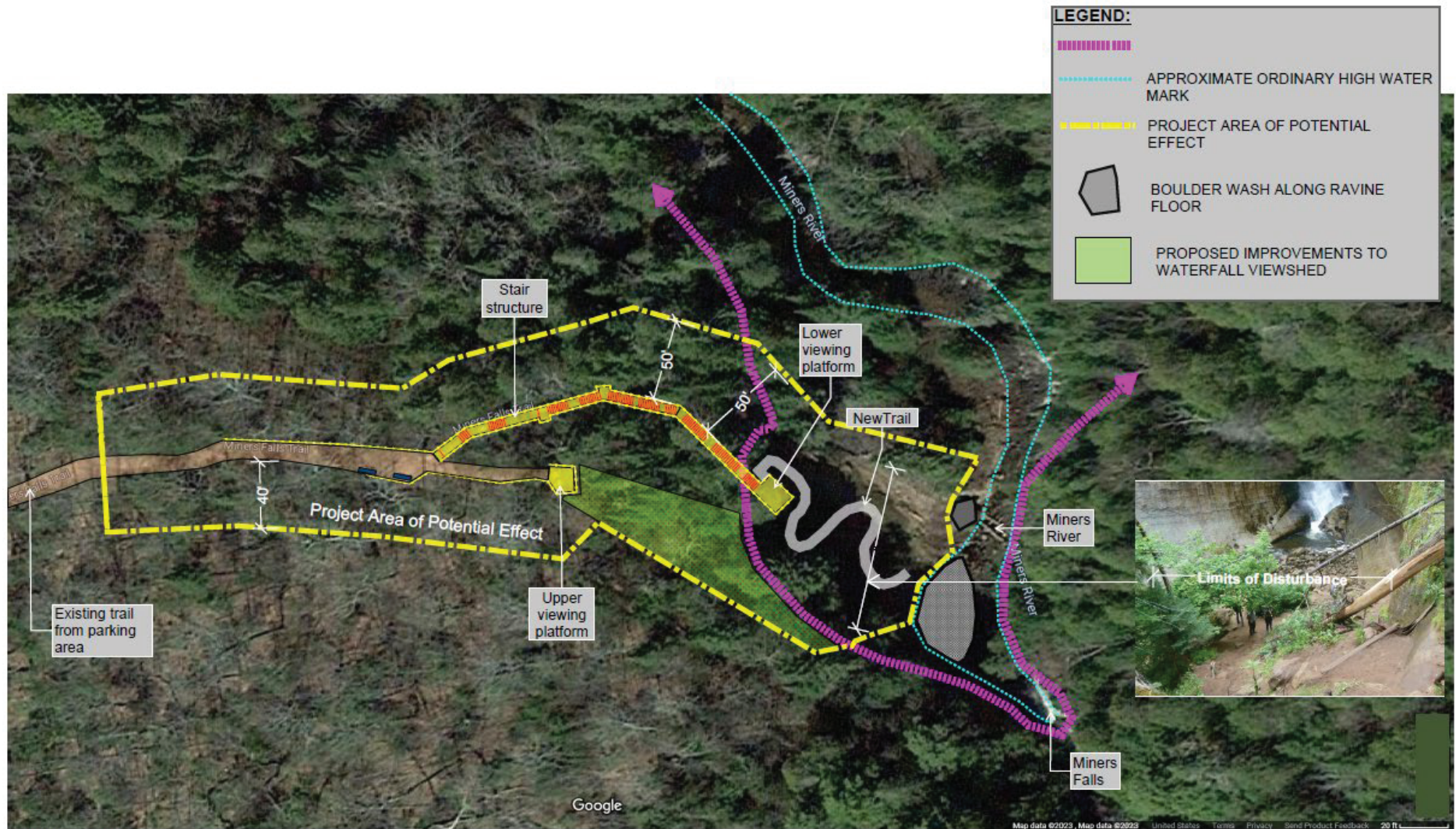


NORTH

March 2024

Figure 4. No Action Alternative Schematic





MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps Further into the Ravine

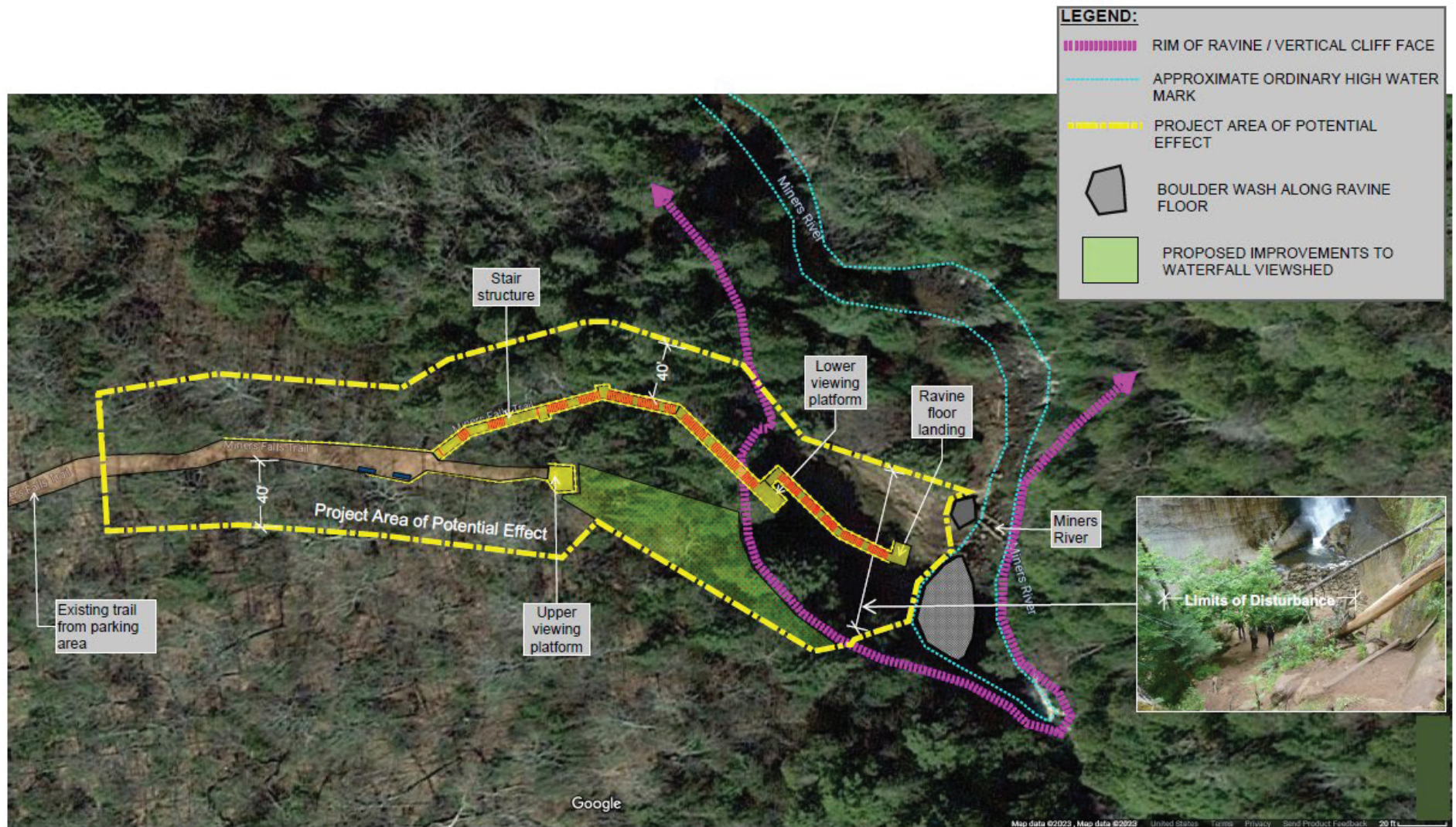


NORTH

March 2024

Figure 5. Action Alternative 1





# MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps to base of the Ravine



March 2024

Figure 6. Action Alternative 2



# United States Department of the Interior

NATIONAL PARK SERVICE  
Pictured Rocks National Lakeshore  
P.O. Box 40  
Munising, Michigan 49862

IN REPLY REFER TO: 1.A.2

March 14, 2024

Chairwoman Nicole Boyd  
Red Cliff Band of Lake Superior Chippewa Indians  
88385 Pike Rd, Hwy 13  
Bayfield, WI 54814

Re: Preliminary Consultation for Miners Falls Stairs and Steps Project

Dear Chairwoman Boyd,

The National Park Service (NPS) is preparing an Environmental Assessment (EA) to support management decisions on a project to rehabilitate the overlook platforms and stair structures at Miners Falls within Pictured Rocks National Lakeshore.

Pictured Rocks National Lakeshore is requesting government to government consultation under 36 CFR 800.3, Section 106 of the National Historic Preservation Act, Executive Order 13175, and Secretarial Order 3403 regarding this project.

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consultation, or guidance you would be willing to provide.

Please contact me at [david\\_horne@nps.gov](mailto:david_horne@nps.gov) or at 906-202-0117 with any questions or comments. If we can provide any additional resources or information, please let us know by April 14, 2024 as we work to complete the environmental assessment process.

Sincerely,

**DAVID HORNE** Digitally signed by DAVID HORNE  
Date: 2024.03.14 13:46:26 -04'00'

David Horne, Superintendent

Enclosures

# Pictured Rocks National Lakeshore

## Miners Falls Viewing Platforms & Steps Rehabilitation Project Location

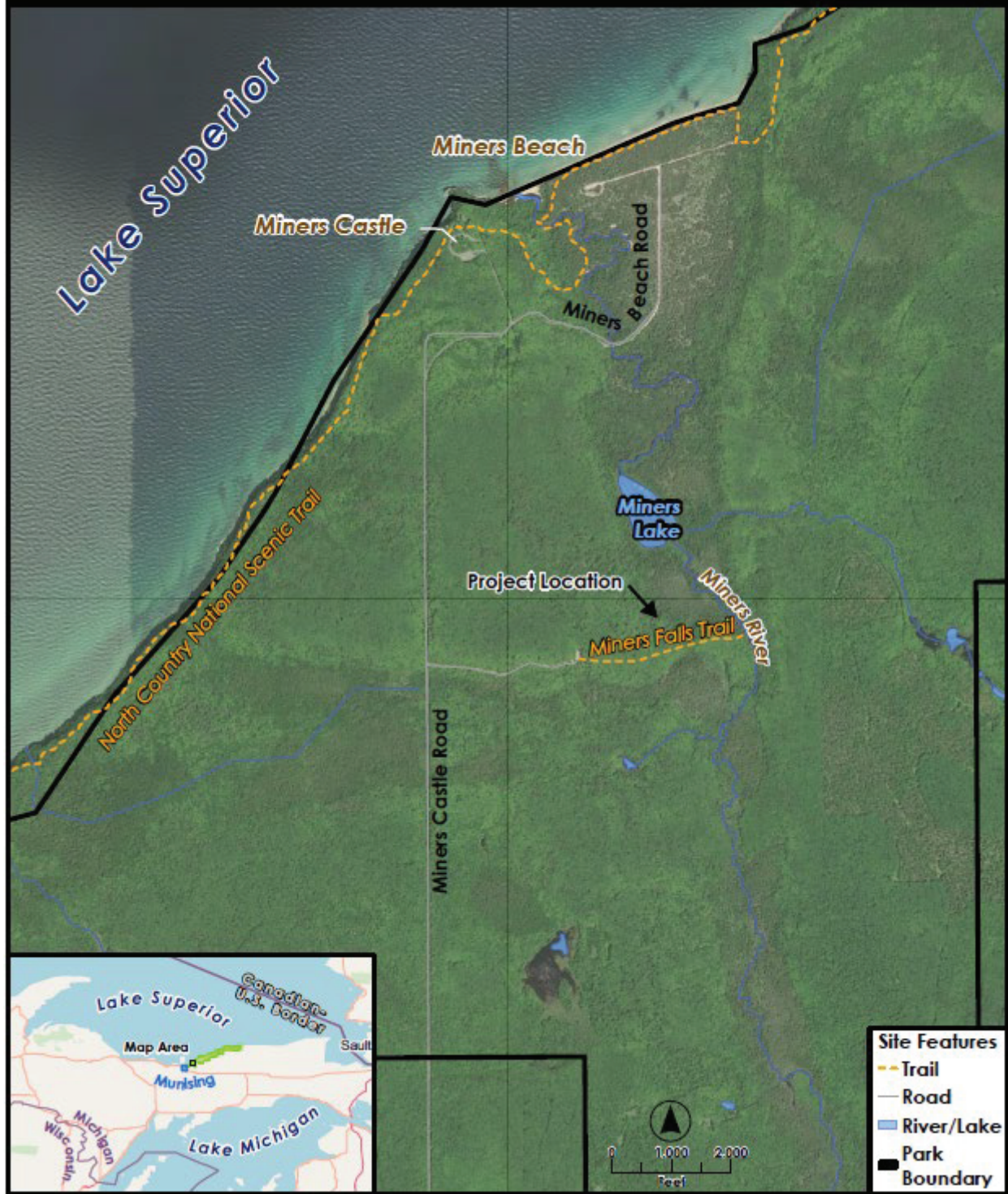


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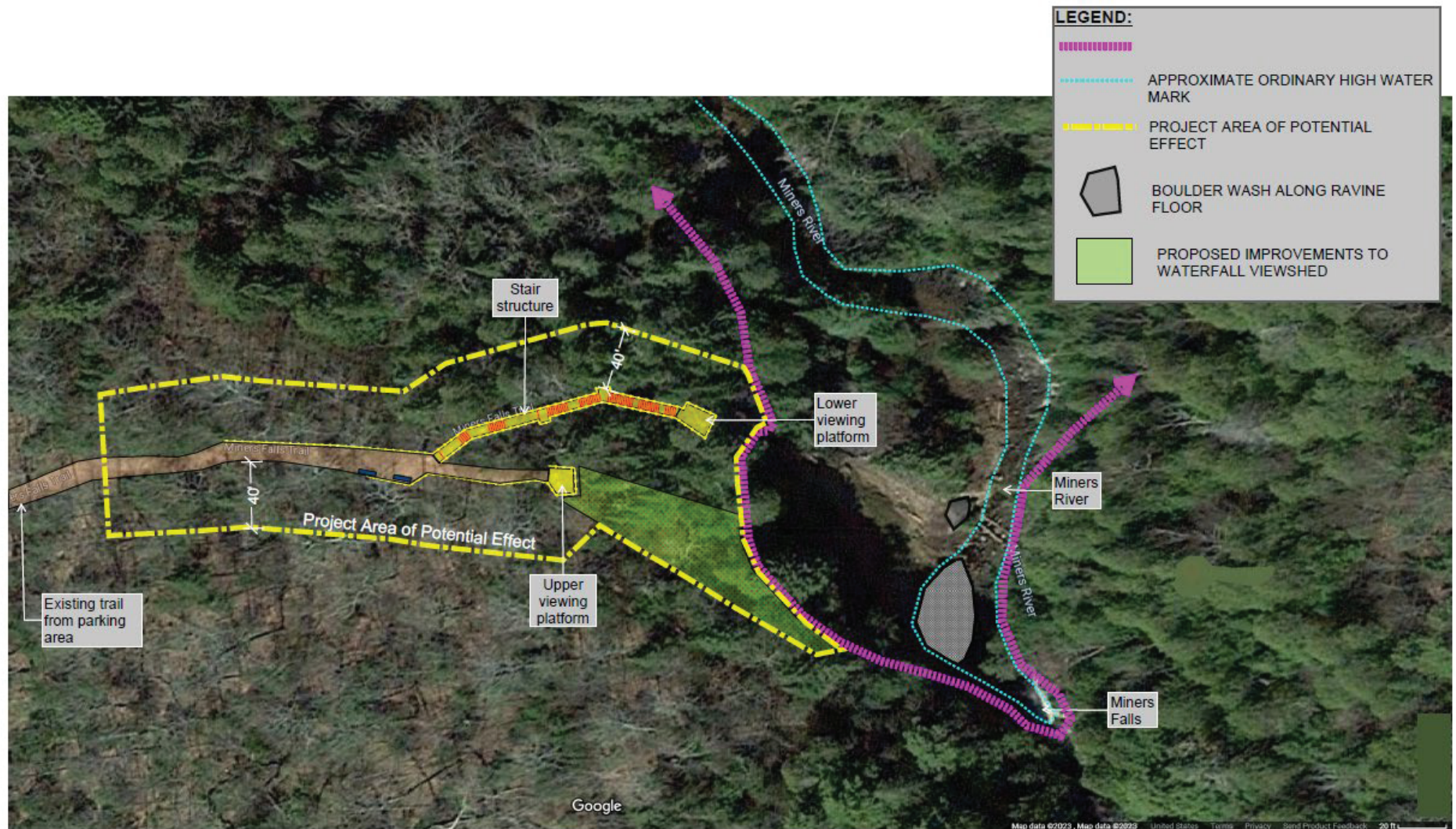


Figure 2 – Undesignated trails leading to valley floor.



Figure 3 – Damage from undesignated trails between lower platform and river.





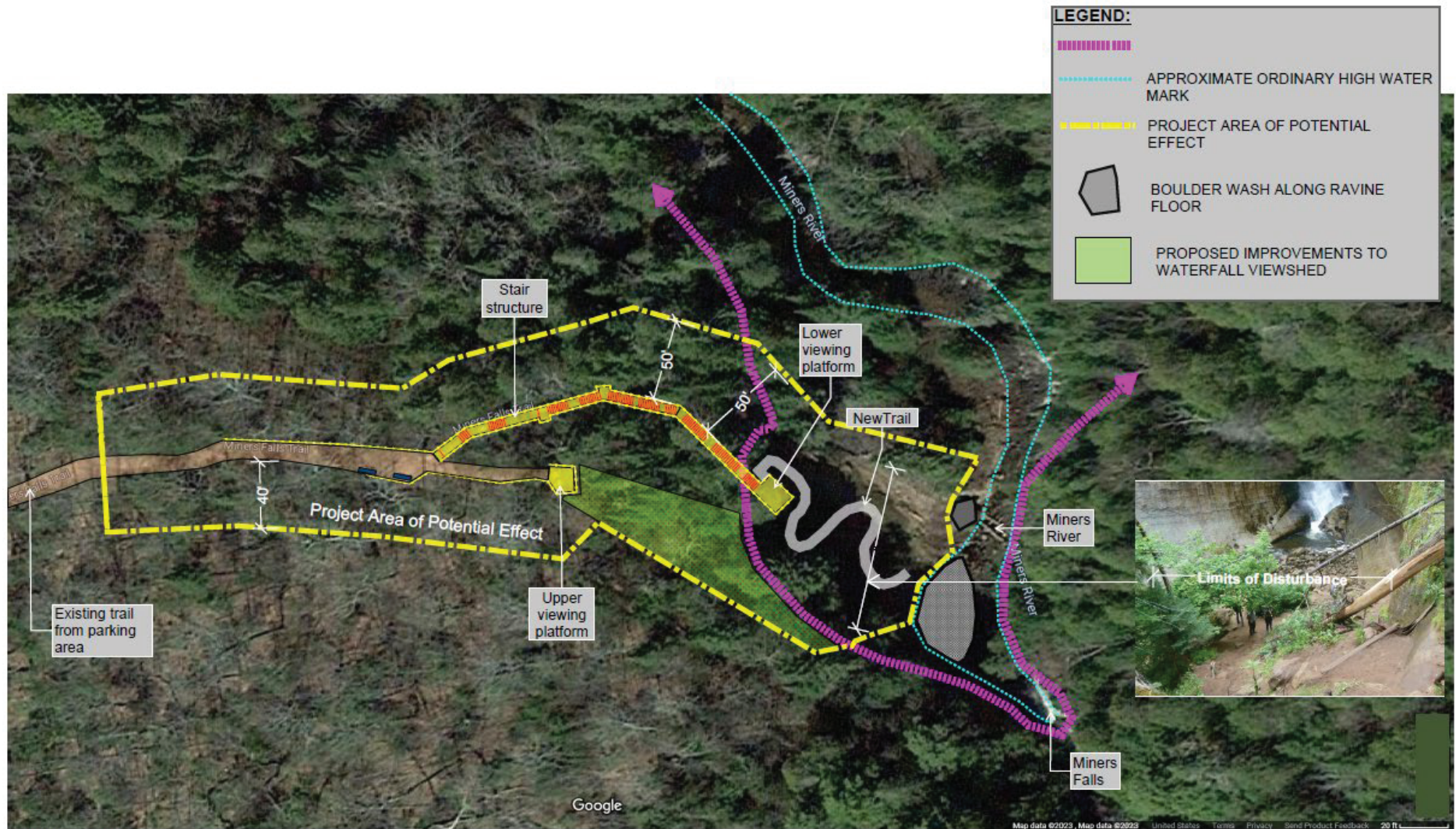
MINERS FALLS STEPS AND OVERLOOK  
No-Action Alternative Exhibit



March 2024

Figure 4. No Action Alternative Schematic





MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps Further into the Ravine

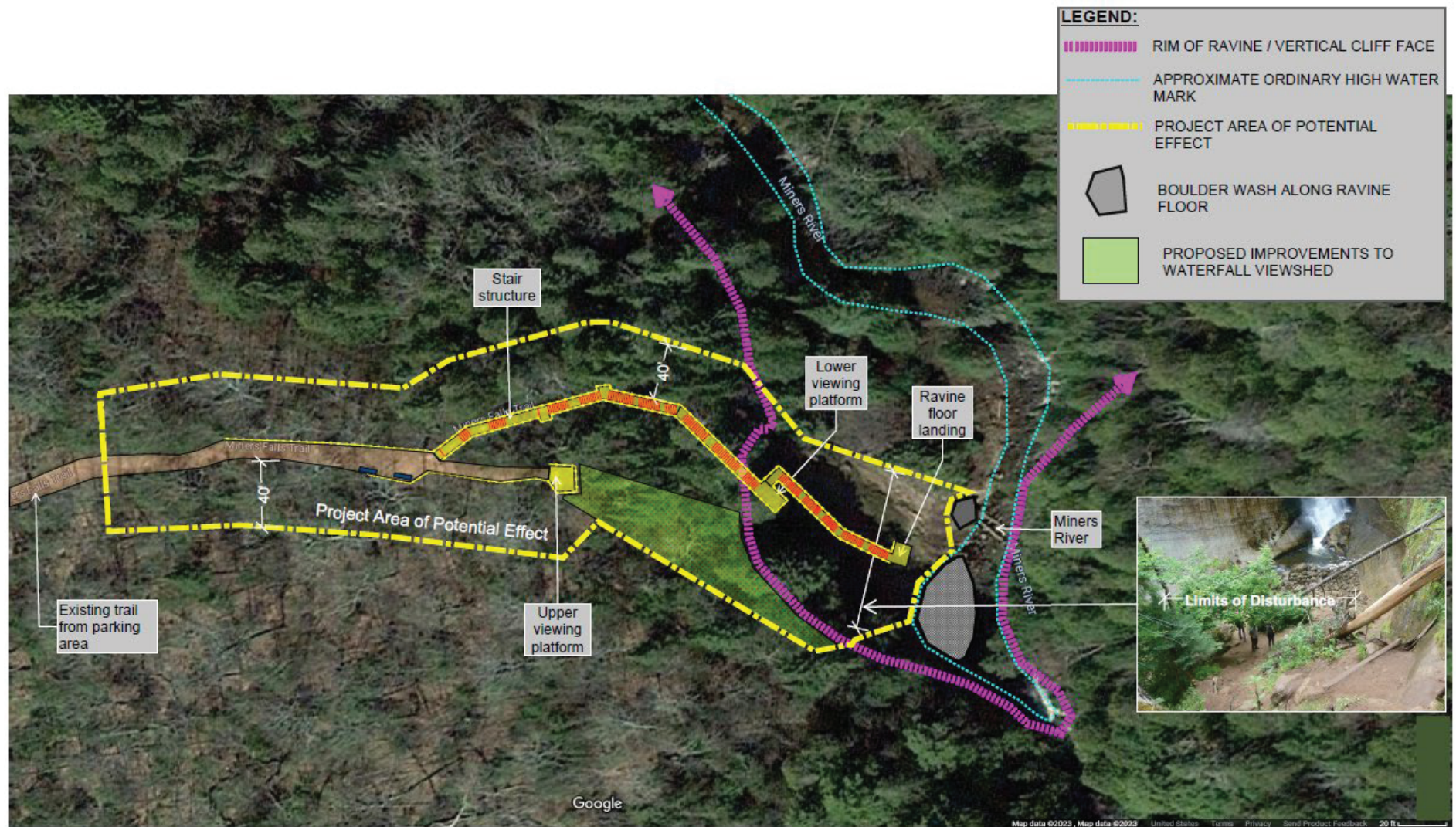


NORTH

March 2024

Figure 5. Action Alternative 1





# MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps to base of the Ravine



March 2024

Figure 6. Action Alternative 2





# United States Department of the Interior

NATIONAL PARK SERVICE  
Pictured Rocks National Lakeshore  
P.O. Box 40  
Munising, Michigan 49862

IN REPLY REFER TO: 1.A.2

March 14, 2024

Chairman Austin Lowes  
Sault Tribe of Chippewa Indians  
523 Ashmun Street  
Sault Ste. Marie, MI 49783

Re: Preliminary Consultation for Miners Falls Stairs and Steps Project

Dear Chairman Lowes,

The National Park Service (NPS) is preparing an Environmental Assessment (EA) to support management decisions on a project to rehabilitate the overlook platforms and stair structures at Miners Falls within Pictured Rocks National Lakeshore.

Pictured Rocks National Lakeshore is requesting government to government consultation under 36 CFR 800.3, Section 106 of the National Historic Preservation Act, Executive Order 13175, and Secretarial Order 3403 regarding this project.

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consultation, or guidance you would be willing to provide.

Please contact me at [david\\_horne@nps.gov](mailto:david_horne@nps.gov) or at 906-202-0117 with any questions or comments. If we can provide any additional resources or information, please let us know by April 14, 2024 as we work to complete the environmental assessment process.

Sincerely,

**DAVID HORNE**

Digitally signed by DAVID  
HORNE  
Date: 2024.03.14 13:51:17 -04'00'

David Horne, Superintendent

Enclosures

# Pictured Rocks National Lakeshore

## Miners Falls Viewing Platforms & Steps Rehabilitation Project Location

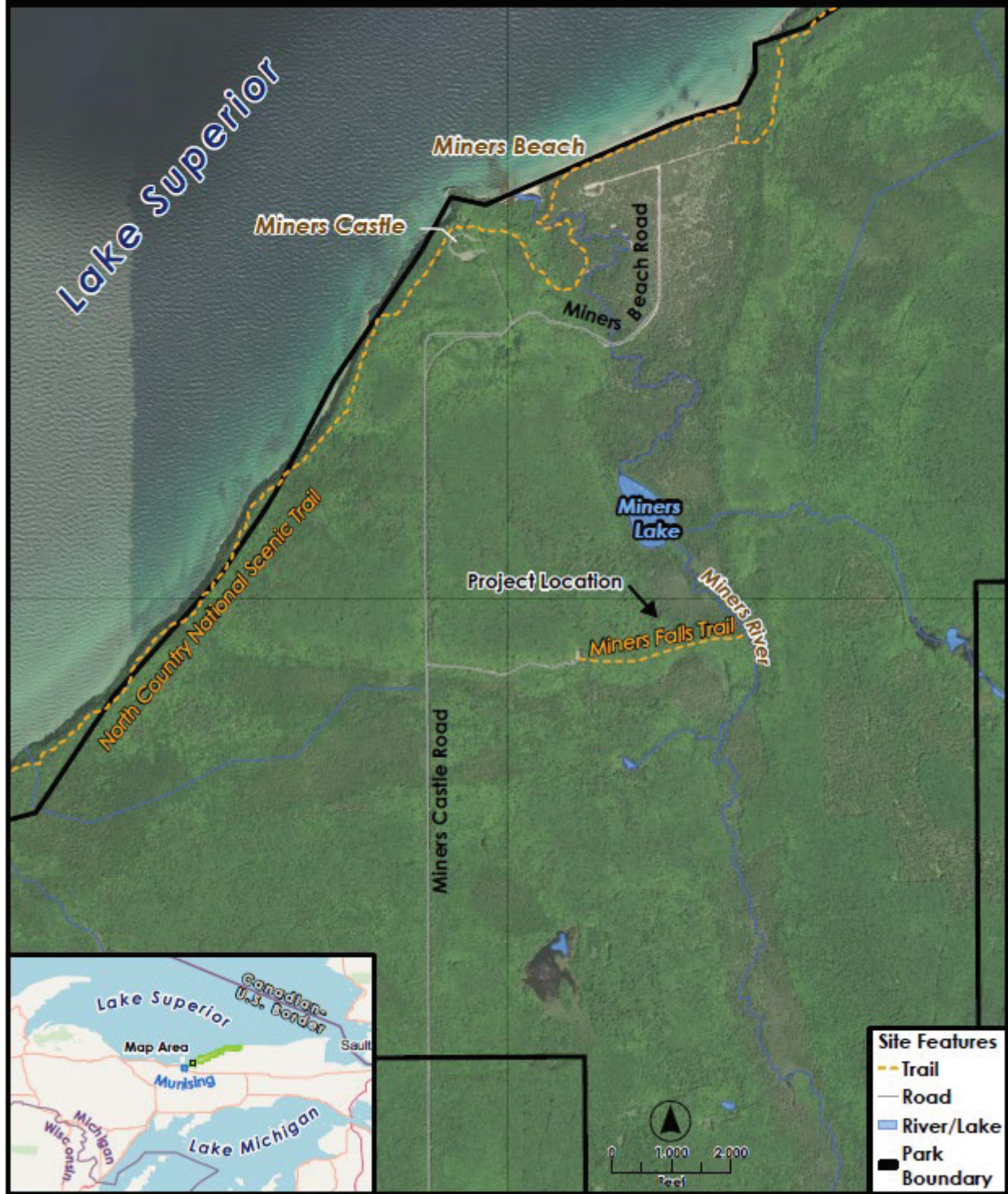


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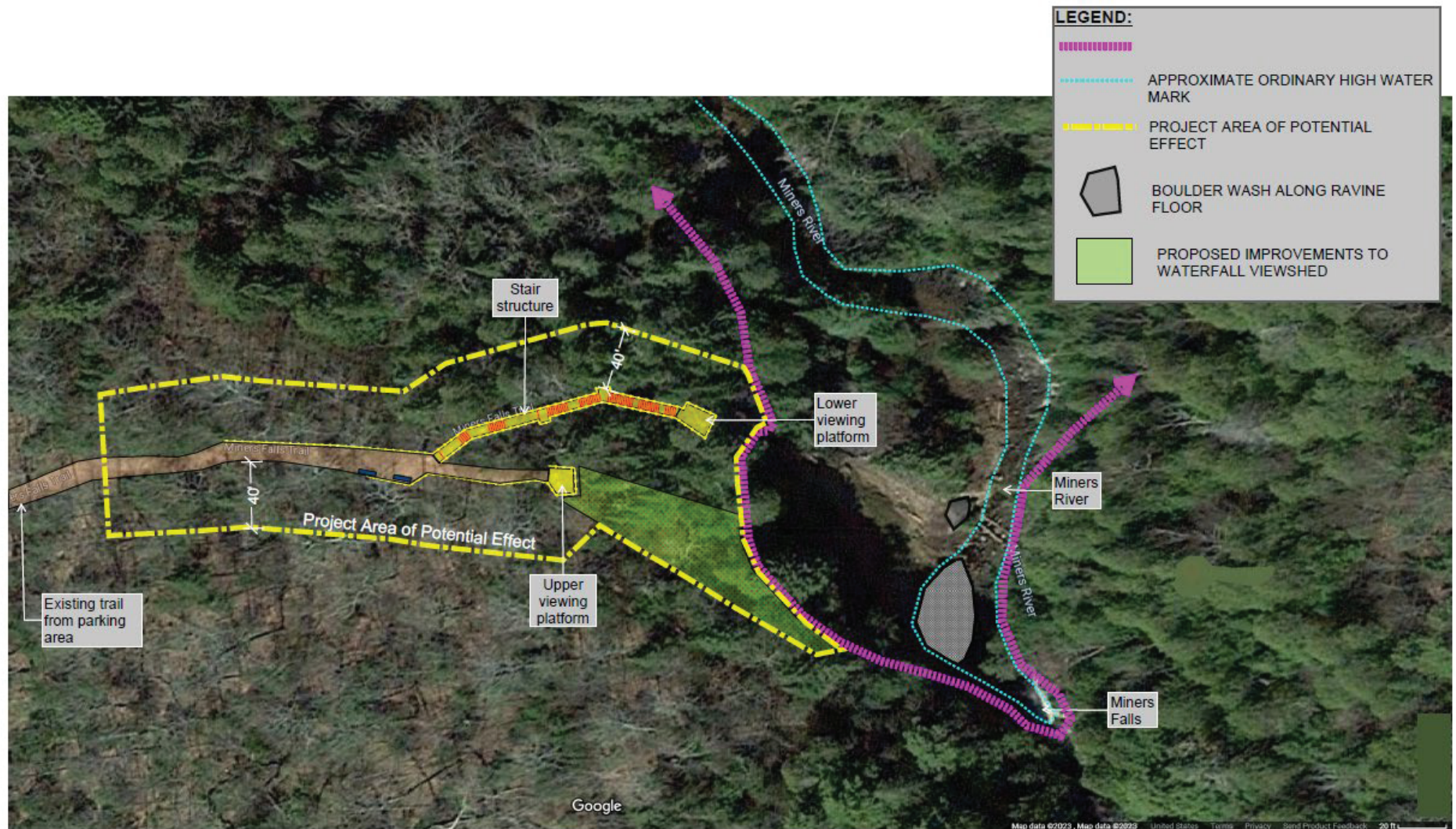


Figure 2 – Undesignated trails leading to valley floor.



Figure 3 – Damage from undesignated trails between lower platform and river.





MINERS FALLS STEPS AND OVERLOOK  
No-Action Alternative Exhibit

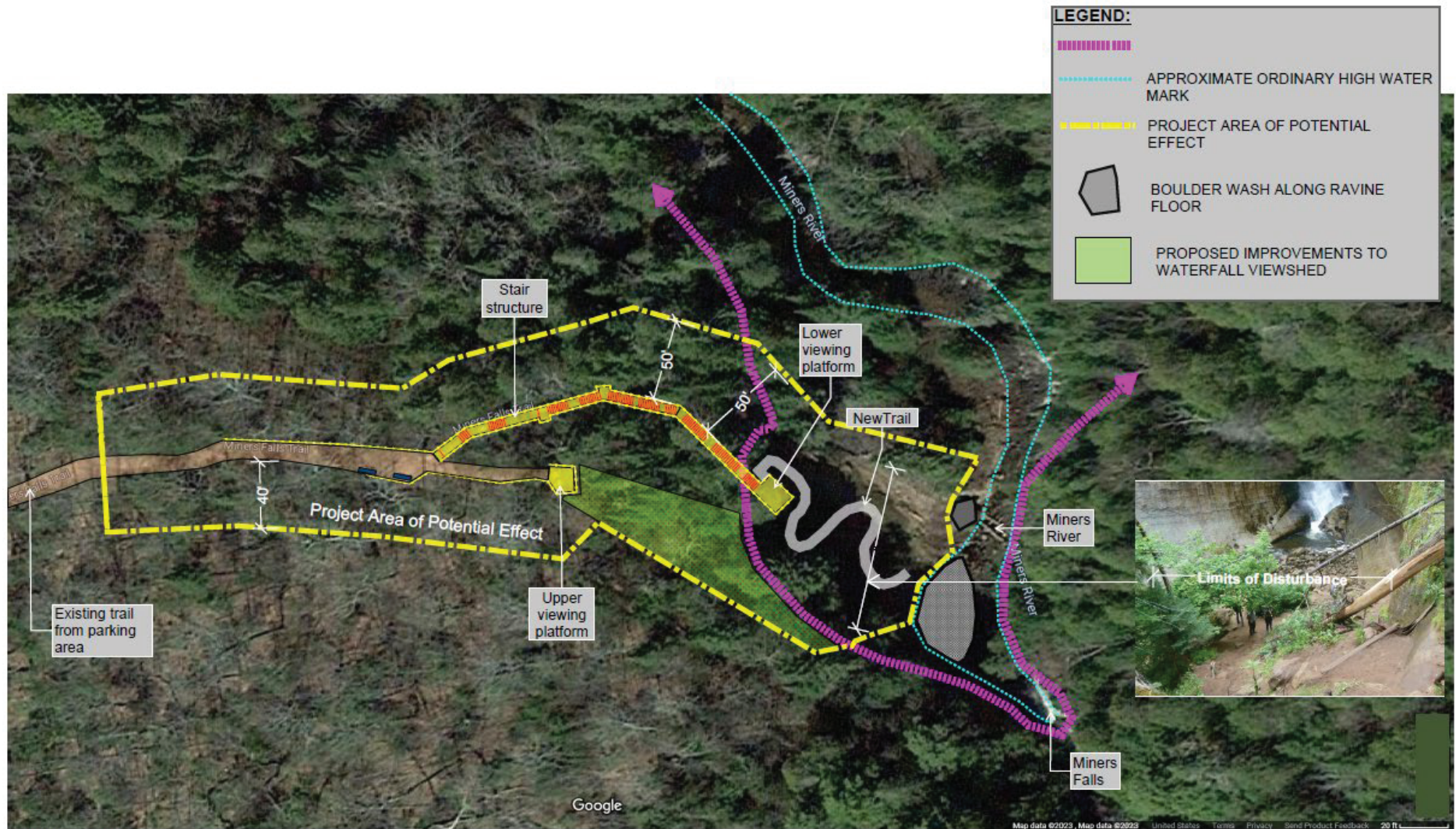


NORTH

March 2024

Figure 4. No Action Alternative Schematic





MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps Further into the Ravine

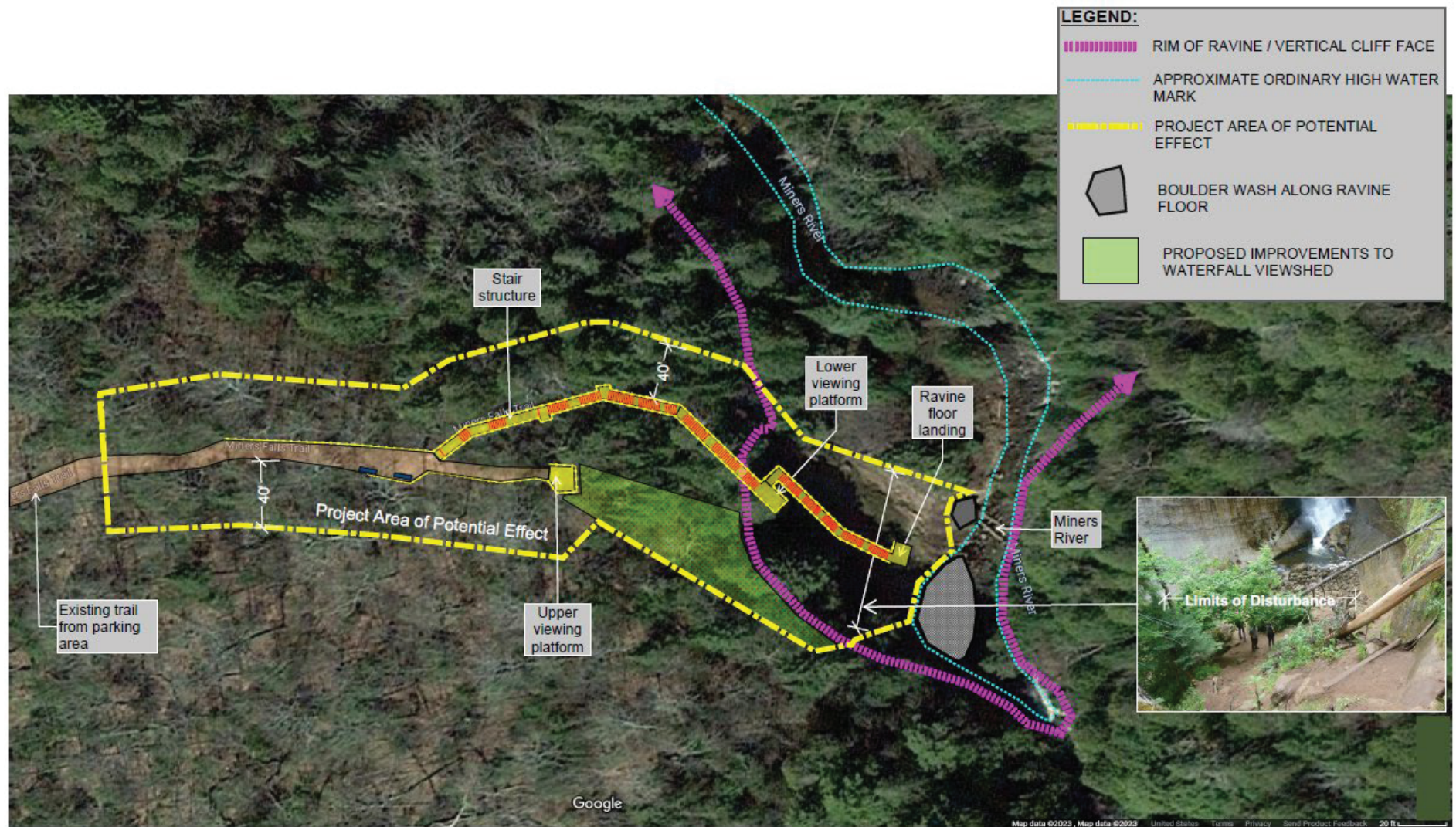


NORTH

March 2024

Figure 5. Action Alternative 1





# MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps to base of the Ravine



NORTH

March 2024

Figure 6. Action Alternative 2



# United States Department of the Interior

NATIONAL PARK SERVICE  
Pictured Rocks National Lakeshore  
P.O. Box 40  
Munising, Michigan 49862

IN REPLY REFER TO: 1.A.2

March 14, 2024

Scott Slagor  
Cultural Resource Program Coordinator  
State Historic Preservation Office  
300 Washington Square  
Lansing, MI 48913

Re: Preliminary Consultation for Miners Falls Stairs and Steps Project

Dear Mr. Slagor,

The National Park Service (NPS) is preparing an Environmental Assessment (EA) to support management decisions on a project to rehabilitate the overlook platforms and stair structures at Miners Falls within Pictured Rocks National Lakeshore (PIRO).

Section 106 of the National Historic Preservation Act of 1966, as amended, requires that federal agencies consult with the State Historic Preservation Office. This letter serves to initiate informal consultation with your office for the referenced project. As part of the EA analysis, NPS has conducted archeological surveys. No historic above ground properties older than 50 years are present.

The purpose of the proposed Miners Falls project is to provide safe public access to the Miners River and the base of Miners Falls, while reducing impacts to the natural environment. The need for action at this time is that the current infrastructure is deteriorating and in need of replacement. Additionally, public demand for access to the river has created undesignated trails which are causing erosion and damage to the vegetation.

Three alternatives are being considered. The “no action alternative” would replace existing infrastructure in kind with no access to the river or base of the falls. Action Alternative 1 would replace existing infrastructure in a similar design with a rustic-style trail diverting from the built infrastructure to allow access to the river and base of falls. Action Alternative 2 would replace existing infrastructure in a similar design with a stair structure to the river and access to the base of the falls. Please find attached additional background information, including maps, photos, and alternative schematics.

Please contact Lara Bender, Environmental Protection Specialist at 906-202-0053 or [lara\\_bender@nps.gov](mailto:lara_bender@nps.gov) with any questions or comments. If we can provide any additional resources or information, please let us know by April 13, 2024 as we work to complete the environmental assessment process.

Sincerely,

**DAVID HORNE** Digitally signed by DAVID  
HORNE  
Date: 2024.03.14 13:54:12 -04'00'

David Horne, Superintendent

Enclosures



# Pictured Rocks National Lakeshore

## Miners Falls Viewing Platforms & Steps Rehabilitation Project Location

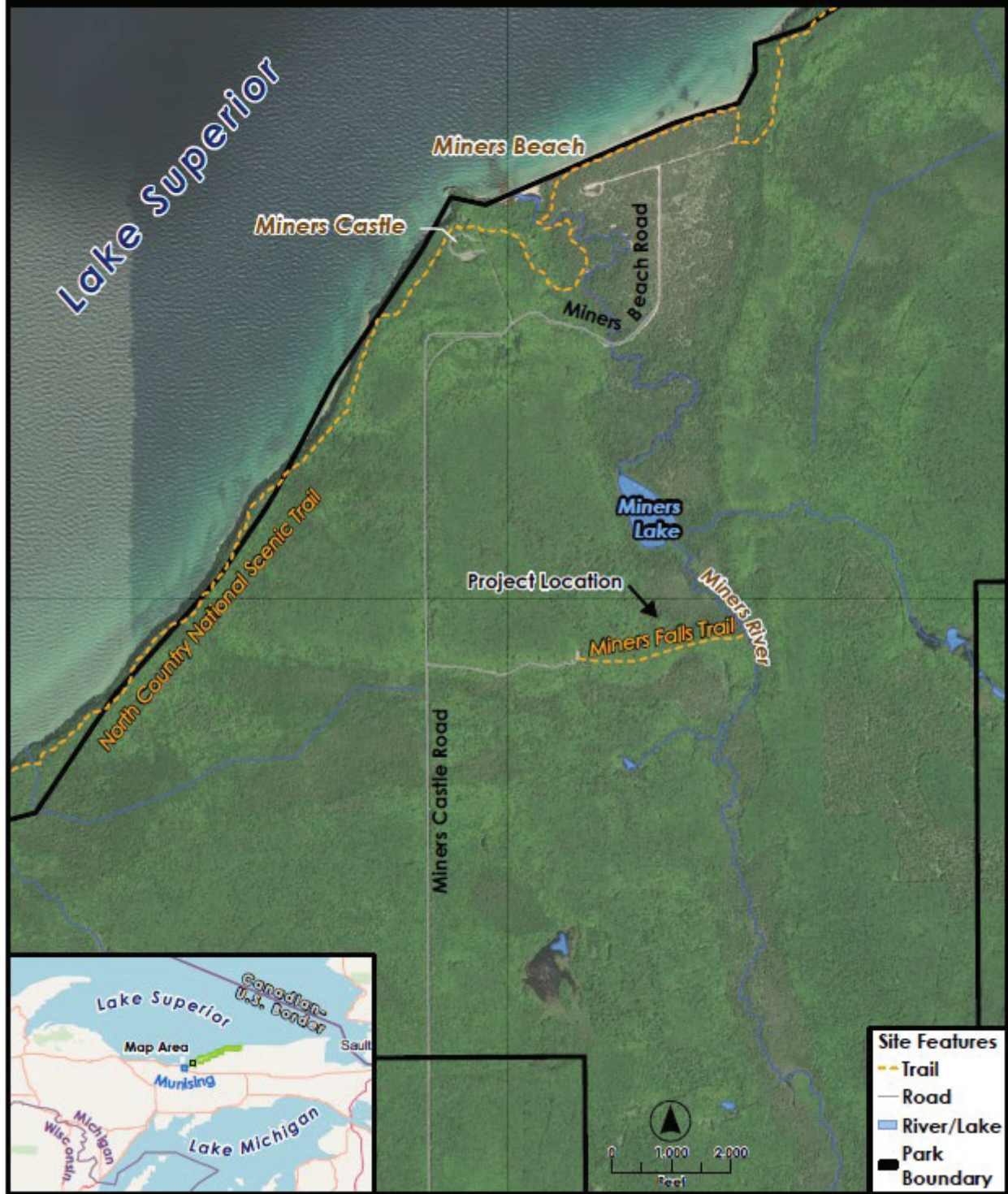


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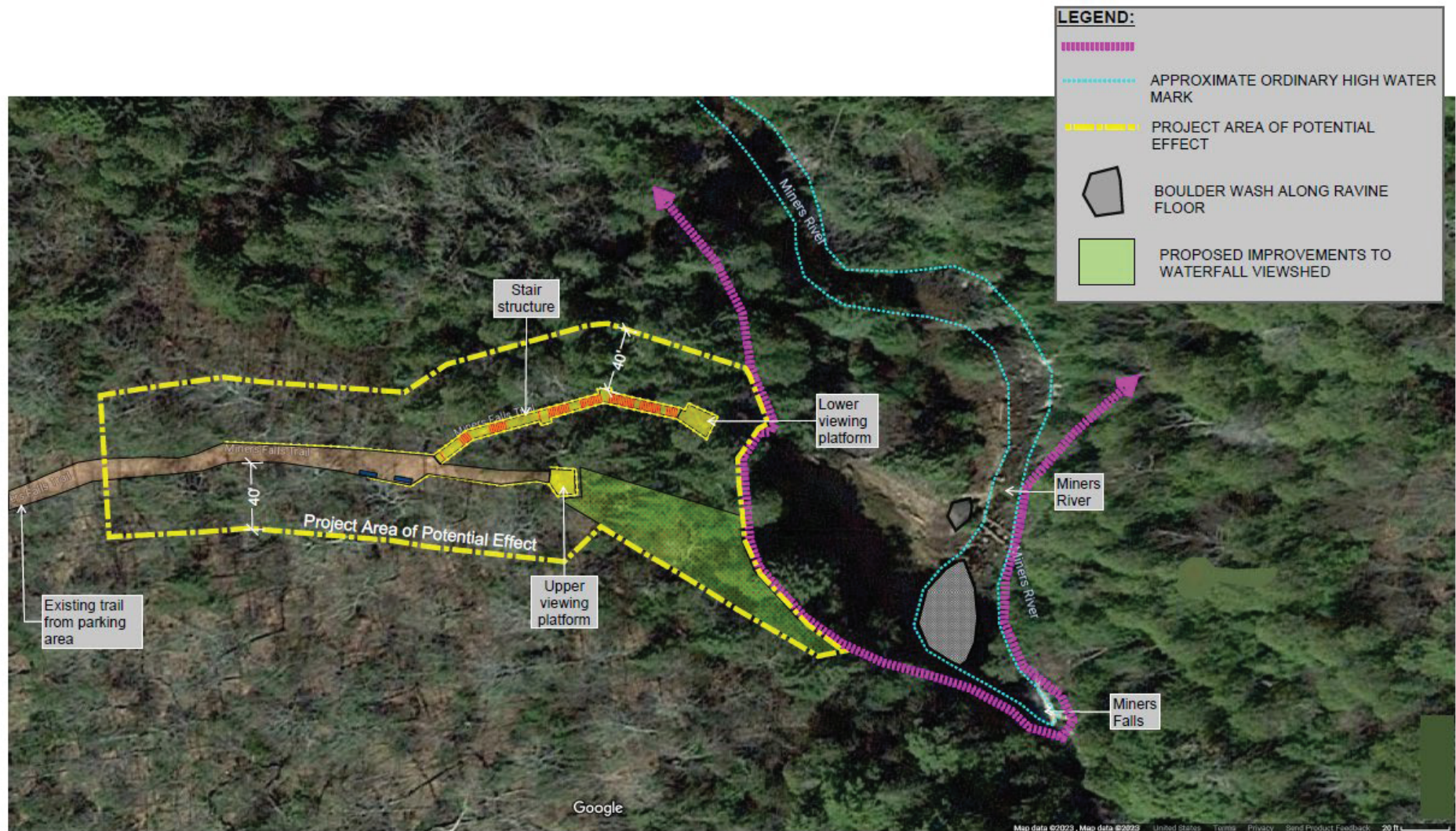


Figure 2 – Undesignated trails leading to valley floor.



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MINERS FALLS STEPS AND OVERLOOK  
No-Action Alternative Exhibit

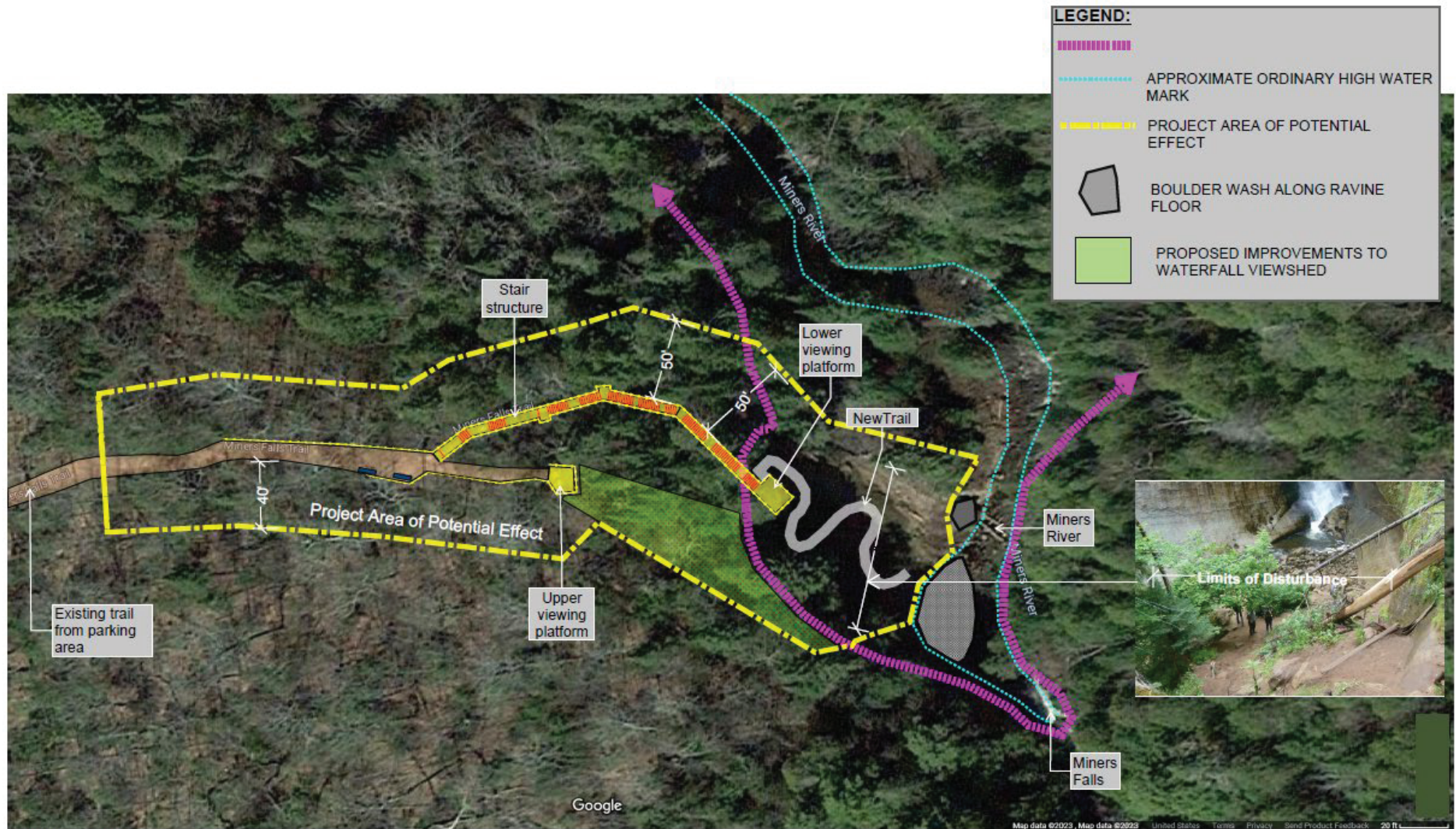


NORTH

March 2024

Figure 4. No Action Alternative Schematic





MINERS FALLS STEPS AND OVERLOOK

## Action Alternative Exhibit - Extend Steps Further into the Ravine



NORTH

March 2024

Figure 5. Action Alternative 1







## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Michigan Ecological Services Field Office  
2651 Coolidge Road Suite 101  
East Lansing, MI 48823-6360  
Phone: (517) 351-2555 Fax: (517) 351-1443



In Reply Refer To:

05/22/2024 14:34:15 UTC

Project Code: 2024-0094024

Project Name: Miners Falls Viewing Platforms and Steps Replacement

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

### Official Species List

The attached species list identifies any Federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Under 50 CFR 402.12(e) (the regulations that implement section 7 of the Endangered Species Act), the accuracy of this species list should be verified after 90 days. You may verify the list by visiting the IPaC website (<https://ipac.ecosphere.fws.gov/>) at regular intervals during project planning and implementation. To update an Official Species List in IPaC: from the My Projects page, find the project, expand the row, and click Project Home. In the What's Next box on the Project Home page, there is a Request Updated List button to update your species list. Be sure to select an "official" species list for all projects.

### Consultation requirements and next steps

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize Federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-Federal representative) must consult with the Fish and Wildlife Service if they determine their project may affect listed species or critical habitat.

There are two approaches to evaluating the effects of a project on listed species.

Approach 1. Use the All-species Michigan determination key in IPaC. This tool can assist you in making determinations for listed species for some projects. In many cases, the determination key



will provide an automated concurrence that completes all or significant parts of the consultation process. Therefore, we strongly recommend screening your project with the **All-Species Michigan Determination Key (Dkey)**. For additional information on using IPaC and available Determination Keys, visit <https://www.fws.gov/media/mifo-ipac-instructions> (and click on the attachment). Please carefully review your Dkey output letter to determine whether additional steps are needed to complete the consultation process.

Approach 2. Evaluate the effects to listed species on your own without utilizing a determination key. Once you obtain your official species list, you are not required to continue in IPaC, although in most cases using a determination key should expedite your review. If the project is a Federal action, you should review our section 7 step-by-step instructions before making your determinations: <https://www.fws.gov/office/midwest-region-headquarters/midwest-section-7-technical-assistance>. If you evaluate the details of your project and conclude “no effect,” document your findings, and your listed species review is complete; you do not need our concurrence on “no effect” determinations. If you cannot conclude “no effect,” you should coordinate/consult with the Michigan Ecological Services Field Office. The preferred method for submitting your project description and effects determination (if concurrence is needed) is electronically to [EastLansing@fws.gov](mailto:EastLansing@fws.gov). Please include a copy of this official species list with your request.

For all **wind energy projects** and **projects that include installing communications towers >450 feet that use guy wires**, please contact this field office directly for assistance, even if no Federally listed plants, animals or critical habitat are present within your proposed project area or may be affected by your proposed project.

### **Migratory Birds**

Please see the “Migratory Birds” section below for important information regarding incorporating migratory birds into your project planning. Our Migratory Bird Program has developed recommendations, best practices, and other tools to help project proponents voluntarily reduce impacts to birds and their habitats. The Bald and Golden Eagle Protection Act prohibits the take and disturbance of eagles without a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at <https://www.fws.gov/program/eagle-management/eagle-permits> to help you avoid impacting eagles or determine if a permit may be necessary.

Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your consideration of threatened and endangered species during your project

planning. Please include a copy of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

## OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Michigan Ecological Services Field Office**

2651 Coolidge Road Suite 101

East Lansing, MI 48823-6360

(517) 351-2555

## PROJECT SUMMARY

Project Code: 2024-0094024

Project Name: Miners Falls Viewing Platforms and Steps Replacement

Project Type: Clearing Forest

Project Description: The National Park Service (NPS) is beginning the preparation of a plan for infrastructure repairs to the Miners Falls Viewing Platforms and Steps. Miners Falls is located off of Miners Castle Road, about 10 miles northeast of Munising, Michigan. The fast-flowing Miners River drops about 60 feet over a sandstone outcrop, creating the park's most powerful waterfall. The walk from the parking area to the waterfall is 0.6 miles down a gently-rolling path through the forest which leads to an upper and a lower overlook.

Miners Falls Trail is a gravel path through a deep woods environment which leads to two overlooks to Miners River and a waterfall that plunges approximately 60 feet over a cliff. The overlooks are the terminus of the trail. However, one of the overlooks has deteriorated overtime and no longer exists. The structures are constructed of treated timbers and lumber. The staircase and lower overlook are situated on a steep slope, extending approximately midway down the valley hillslope. Historically, there is evidence that a previous staircase provided access to the bottom of the valley.

Due to age and location within a frequently damp forested area of limited sun exposure, the current structures are progressively deteriorating to a state of potential safety concerns for the visiting public. Additionally, public demand for access to the river has created undesignated trails which are causing erosion and damage to the surrounding vegetation. The purpose of this project is to provide safe public access to the Miners River and base of Miners Falls, while reducing impacts to the natural environment and address public request for access to the river.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@46.4747139,-86.53160395502577,14z>





Counties: Alger County, Michigan

## ENDANGERED SPECIES ACT SPECIES

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 2 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.



## MAMMALS

| NAME   | STATUS                 |
|--|------------------------|
| Canada Lynx <i>Lynx canadensis</i><br>Population: Wherever Found in Contiguous U.S.<br>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: <a href="https://ecos.fws.gov/ecp/species/3652">https://ecos.fws.gov/ecp/species/3652</a>   | Threatened             |
| Gray Wolf <i>Canis lupus</i><br>Population: U.S.A.: All of AL, AR, CA, CO, CT, DE, FL, GA, IA, IN, IL, KS, KY, LA, MA, MD, ME, MI, MO, MS, NC, ND, NE, NH, NJ, NV, NY, OH, OK, PA, RI, SC, SD, TN, TX, VA, VT, WI, and WV; and portions of AZ, NM, OR, UT, and WA. Mexico.<br>There is <b>final</b> critical habitat for this species.<br>Species profile: <a href="https://ecos.fws.gov/ecp/species/4488">https://ecos.fws.gov/ecp/species/4488</a> | Endangered             |
| Northern Long-eared Bat <i>Myotis septentrionalis</i><br>No critical habitat has been designated for this species.<br>Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>   | Endangered             |
| Tricolored Bat <i>Perimyotis subflavus</i><br>No critical habitat has been designated for this species.<br>This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> <li>This species only needs to be considered if the project includes wind turbine operations.</li> </ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>         | Proposed<br>Endangered |

## BIRDS

| NAME   | STATUS     |
|--|------------|
| Piping Plover <i>Charadrius melodus</i><br>Population: [Great Lakes watershed DPS] - Great Lakes, watershed in States of IL, IN, MI, MN, NY, OH, PA, and WI and Canada (Ont.)<br>There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a>   | Endangered |
| Rufa Red Knot <i>Calidris canutus rufa</i><br>There is <b>proposed</b> critical habitat for this species.<br>This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> <li>Only actions that occur along coastal areas during the Red Knot migratory window of MAY 1 - SEPTEMBER 30.</li> </ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a> | Threatened |

## INSECTS

| NAME   | STATUS    |
|--|-----------|
| Monarch Butterfly <i>Danaus plexippus</i><br>No critical habitat has been designated for this species.<br>Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a> | Candidate |

## FLOWERING PLANTS

| NAME   | STATUS     |
|--|------------|
| Pitcher's Thistle <i>Cirsium pitcheri</i><br>No critical habitat has been designated for this species.<br>Species profile: <a href="https://ecos.fws.gov/ecp/species/8153">https://ecos.fws.gov/ecp/species/8153</a> | Threatened |

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

## USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

## BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act<sup>1</sup> and the Migratory Bird Treaty Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats<sup>3</sup>, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

- 
1. The [Bald and Golden Eagle Protection Act](#) of 1940.
  2. The [Migratory Birds Treaty Act](#) of 1918.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.



| NAME   | BREEDING SEASON        |
|--|------------------------|
| Bald Eagle <i>Haliaeetus leucocephalus</i><br>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.<br><a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a> | Breeds Dec 1 to Aug 31 |

## PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

### Breeding Season (■)

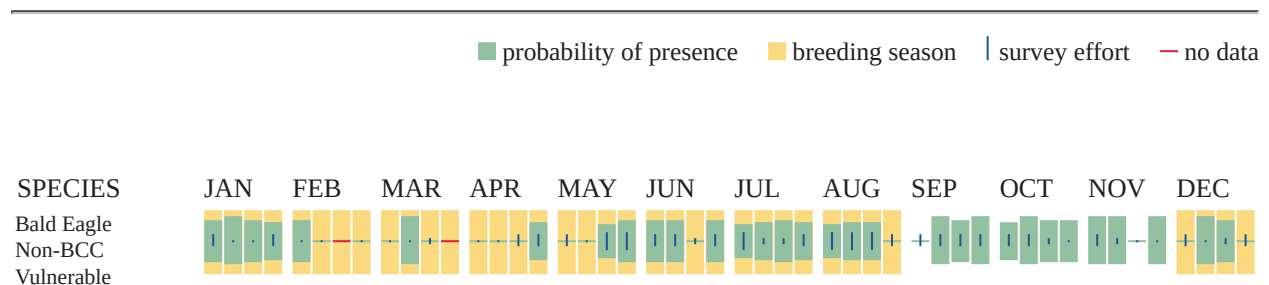
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

### Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

### No Data (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>

- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

## MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats<sup>3</sup> should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

| NAME   | BREEDING SEASON         |
|--|-------------------------|
| Bald Eagle <i>Haliaeetus leucocephalus</i><br>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.<br><a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a> | Breeds Dec 1 to Aug 31  |
| Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br><a href="https://ecos.fws.gov/ecp/species/9399">https://ecos.fws.gov/ecp/species/9399</a>  | Breeds May 15 to Oct 10 |
| Bobolink <i>Dolichonyx oryzivorus</i><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br><a href="https://ecos.fws.gov/ecp/species/9454">https://ecos.fws.gov/ecp/species/9454</a>   | Breeds May 20 to Jul 31 |



| NAME   | BREEDING SEASON         |
|--|-------------------------|
| <b>Canada Warbler <i>Cardellina canadensis</i></b><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br><a href="https://ecos.fws.gov/ecp/species/9643">https://ecos.fws.gov/ecp/species/9643</a>                              | Breeds May 20 to Aug 10 |
| <b>Chimney Swift <i>Chaetura pelagica</i></b><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br><a href="https://ecos.fws.gov/ecp/species/9406">https://ecos.fws.gov/ecp/species/9406</a>                                   | Breeds Mar 15 to Aug 25 |
| <b>Common Tern <i>Sterna hirundo</i></b><br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA<br><a href="https://ecos.fws.gov/ecp/species/4963">https://ecos.fws.gov/ecp/species/4963</a>                     | Breeds May 1 to Aug 31  |
| <b>Evening Grosbeak <i>Coccothraustes vespertinus</i></b><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br><a href="https://ecos.fws.gov/ecp/species/9465">https://ecos.fws.gov/ecp/species/9465</a>                       | Breeds May 15 to Aug 10 |
| <b>Lesser Yellowlegs <i>Tringa flavipes</i></b><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br><a href="https://ecos.fws.gov/ecp/species/9679">https://ecos.fws.gov/ecp/species/9679</a>                                 | Breeds elsewhere        |
| <b>Olive-sided Flycatcher <i>Contopus cooperi</i></b><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br><a href="https://ecos.fws.gov/ecp/species/3914">https://ecos.fws.gov/ecp/species/3914</a>                           | Breeds May 20 to Aug 31 |
| <b>Ruddy Turnstone <i>Arenaria interpres morinella</i></b><br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA<br><a href="https://ecos.fws.gov/ecp/species/10633">https://ecos.fws.gov/ecp/species/10633</a> | Breeds elsewhere        |
| <b>Veery <i>Catharus fuscescens fuscescens</i></b><br>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA<br><a href="https://ecos.fws.gov/ecp/species/11987">https://ecos.fws.gov/ecp/species/11987</a>         | Breeds May 15 to Jul 15 |
| <b>Wood Thrush <i>Hylocichla mustelina</i></b><br>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.<br><a href="https://ecos.fws.gov/ecp/species/9431">https://ecos.fws.gov/ecp/species/9431</a>                                  | Breeds May 10 to Aug 31 |

## PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental](#)

[Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

### Breeding Season (■)

Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

### Survey Effort (|)

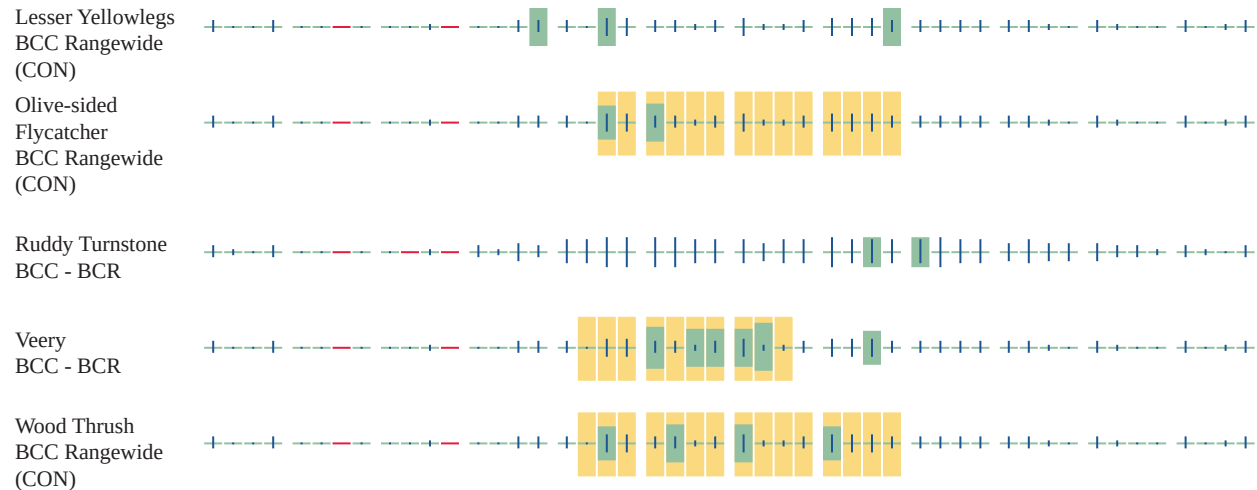
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

### No Data (—)

A week is marked as having no data if there were no survey events for that week.







Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

## WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

### RIVERINE

- R3UBH

## IPAC USER CONTACT INFORMATION

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

US Department of the Interior – National Park Service