



United States Department of Agriculture

# West Glacier Spur Road Area Enhancements

## Environmental Assessment



Forest Service  
Alaska Region

Tongass National Forest  
Juneau Ranger District

R10-MB-767 January 2015

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Cover: West Glacier Spur Road flooded in August 2014

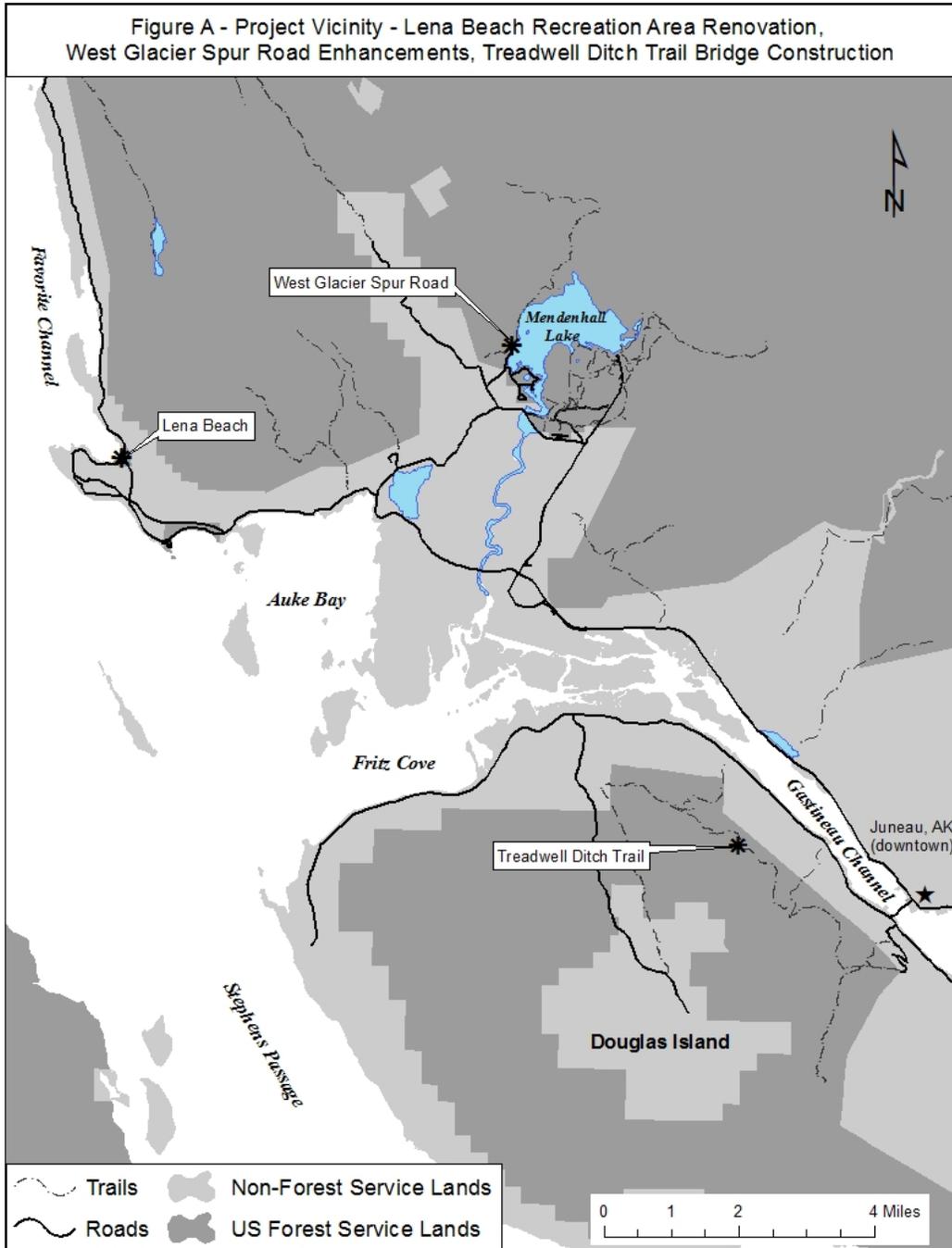
## Summary Table

<p>What action is proposed?</p>	<p>The Proposed Action is to:</p> <ul style="list-style-type: none"> <li>• Construct and adjust parking at Tolch Rock Trail and Skater’s Cabin;</li> <li>• Install a gate for emergency and administrative needs;</li> <li>• Construct a 0.4 mile bike and pedestrian trail extension to separate bike tours, cross-country skiing, and other pedestrian use from vehicular traffic. Install bike racks;</li> <li>• Adjust the Tolch Rock Trail to allow for skier access to the new groomed bike path</li> <li>• Move an existing vault, water valve, and waterline 30 feet further east to the east side of the bike path and above ground.</li> <li>• Install a six-unit vault outhouse at the road’s terminus;</li> <li>• Connect the outhouses to the paddle craft launch area with fully accessible paths;</li> <li>• Construct a spur trail from West Glacier Trail to the shore of Mendenhall Lake;</li> <li>• Install rocks for seating at locations near the lake; and</li> <li>• Fabricate and install directional and informational signs, including 2 or 3 interpretive signs.</li> </ul>
<p>Why?</p>	<p>The condition and design of the West Glacier Road area present safety concerns and no longer provide a quality recreation experience for the following reasons:</p> <ol style="list-style-type: none"> <li>1) The end of West Glacier Spur Road becomes congested in the summer season with many different uses and users.</li> <li>2) The bike and pedestrian path ends at the campground, causing pedestrians, bikers, and bike tours to use the road to access the West Glacier area along with the bus and transportation van traffic. The current flow of mixed pedestrian and vehicle traffic can present a safety hazard.</li> <li>3) Capacity for parking is limited near the campground in the winter and does not meet the demand for the popularity of cross-country skiing on the groomed trails.</li> <li>4) The Forest Service road has experienced annual flooding events, and there have been other administrative needs which require periodic temporary road closure for safety. No means of physical road closure is currently available.</li> <li>5) An existing City of Juneau water system valve is currently located underwater on the edge of the road. Because the valve is under water at this location the anti-siphon valve does not function on the water line and would not prevent untreated water from entering the city water system in the event of a pressure drop in the water system.</li> <li>6) The current path to the rental outhouses does not meet trail accessibility standards.</li> <li>7) Non-commercial visitors and commercial tours sometimes compete for space along the shoreline of Mendenhall Lake, especially at</li> </ol>

	<p>high water levels when people cannot walk on the beach. A user-created trail that provides access to the lake at higher water levels already exists, but it is brushy and sometimes gets muddy.</p> <p>8) There are inadequate toilet facilities to meet the areas demands. During the summer, five portable outhouses are provided at the road's terminus, and are serviced three days a week at great expense. In the winter, no toilet facilities are available at the road's terminus.</p> <p>9) Interpretation has long been recognized as playing an important role in the Mendenhall Glacier Recreation Area. Those actions have never been taken.</p> <p>10) In 2013, the Forest Service successfully competed for Federal Lands Access Program (FLAP) dollars administered by the Federal Highway Administration which will allow the Forest Service to renovate this site over the next few years.</p>
What other action would meet the same need?	A different location for the outhouse (such as Alternative 3) would put the outhouse in a higher location further from the lake to reduce potential affects to water quality, meet State water quality regulations, and to avoid the need for a variance.
What would it mean not to meet the need?	The West Glacier Spur Road area would remain in its current configuration. Congestion and safety hazards from traffic would continue. Safety hazards would remain and be difficult to manage. Facilities would remain inaccessible to some users. Unsightly and expensive-to-operate toilet facilities would continue at the site. Due to a lack of public education, continued vandalism may occur to historic properties. Dedicated funding would not be used and would not be available to other projects.
What factors will be used when making the decision between alternatives?	This environmental assessment does not identify any significant environmental consequences of the Proposed Action. However, adverse environmental consequences of the alternatives will be considered along with benefits of improved safety and recreation experience.
Are there any ways to mitigate adverse effects?	The primary method for reducing adverse effects is through the implementation of Design Criteria included in the Proposed Action and application of Best Management Practices. Additional mitigation includes blocking, and trapping and moving fish in some areas to minimize direct impacts to resident and rearing. Using temporary planks during construction where feasible to minimize damage to the stream channel and stream banks.
What monitoring is required?	To avoid effects to known historic properties, when under construction, the bike path, gate, vault/water valve/waterline, and "deepened" parking area at Skaters Cabin shall be periodically monitored by an archeologist.

## Location and Background

West Glacier Spur Road (#8453), sometimes referred to as Skater's Spur, is on the west shore of Mendenhall Lake in Juneau, Alaska (see West Glacier Spur Road in Figure A).



This area is popular and important for local and commercial use. In a very short distance, less than 1/2 mile, this road provides access to Mendenhall Lake Campground (MLCG), Skater's Cabin day use facility, a commercial and a non-commercial paddle craft launch, and the trailheads for Tolch Rock and West Glacier trails.

Mendenhall Glacier is Juneau's premier attraction, and one of the top three attractions in Alaska. Six outfitter/guide companies, serving nearly 30,000 clients, conduct operations off of West Glacier Spur Road between May and October each year. Commercial use in this area includes bicycle, hiking, and boating (raft, kayak, canoe) tours. The MLCG is the largest campground on the Tongass National Forest at 70 sites. And Skater's Cabin is a rental shelter built by the Civilian Conservation Corps (CCC) that is particularly popular with local residents.

The proposed activities would occur in the Special Interest Area Land Use Designation (LUD). The goal in this LUD is to preserve, through inventory, maintenance, interpretation, and protection, the area's unique cultural, geological, botanical, zoological, recreational, scenic, or other special features. The 1996 Mendenhall Glacier Recreation Area Management Plan directed that we manage the area principally for recreation use while retaining the area substantially in its natural condition. Primary emphasis was to be placed on protecting natural resource values while balancing natural resource use with human recreation needs. The overall vision for the Recreation Area was for the area to remain relatively undeveloped, allowing for moderately concentrated use at West Glacier Trailhead.

## Purpose and Need for the Proposal

The purpose of this proposal is to address safety concerns, and the functionality and enjoyment of the high use West Glacier road area. The Tongass Forest Plan (USDA Forest Service 2008) directs the Forest Service to maintain high use recreation sites for the health and safety of all users; to provide barrier-free, accessible facilities appropriate to the site development level and area ROS setting; and to maintain roads, as necessary, to provide passage of planned traffic. The Forest Plan also directs us to maintain fish habitat and minimize soil erosion and sediment transport. This project is needed because the condition and design of the West Glacier Road area present safety concerns and no longer provide a quality recreation experience for the following reasons:

- 1) The end of West Glacier Spur Road becomes congested in the summer season with many different uses and users.
- 2) The bike and pedestrian path ends at the MLCG, causing pedestrians, bikers, and bike tours to use the road to access the West Glacier area along with the bus and transportation van traffic. The current flow of mixed pedestrian and vehicle traffic can present a safety hazard.
- 3) Capacity for parking is limited near the campground in the winter and does not meet the demand for the popularity of cross-country skiing on the groomed trails. It has led to people parking along the main road and in the adjoining neighborhood which causes conflict with adjoining private landowners, safety concerns, and challenges for snow removal.
- 4) The Forest Service road has experienced annual flooding events, and there have been other administrative needs which require periodic temporary road closure for safety. No means of physical road closure is currently available.
- 5) An existing City of Juneau water system valve is currently located underwater on the edge of the road (east of the pavement) 70 feet south of the end of the paved bike path. Because the valve is under water at this location the anti-siphon valve does not function on the water line and would not prevent untreated water from entering the city water system in the event of a pressure drop in the water system.
- 6) The current path to the rental outhouses does not meet trail accessibility standards.
- 7) Non-commercial visitors and commercial tours sometimes compete for space along the shoreline of Mendenhall Lake, especially at high water levels when people cannot walk on the beach. A user-created trail that provides access to the lake at higher water levels already exists, but it is brushy and sometimes gets muddy.
- 8) There are inadequate toilet facilities to meet the areas demands. During the summer, five portable outhouses are provided at the road's terminus, and are serviced three days a week at great expense. In the winter, no toilet facilities are available at the road's terminus.

- 9) Interpretation has long been recognized as playing an important role in a large recreation complex such as the Mendenhall Glacier Recreation Area, West Lakeshore Unit. While the 1996 Management Plan said to "...Coordinate interpretive messages posted at the West Glacier Trailhead into the Mendenhall Valley Interpretive Plan" and "...implement (interpretive) programs at campground and Skater's Cabin...", those actions have never been taken.
- 10) In 2013, the Forest Service successfully competed for Federal Lands Access Program (FLAP) dollars administered by the Federal Highway Administration which will allow the Forest Service to renovate this site over the next few years.

## Unresolved Concerns

Several concerns with the Proposed Action were identified through scoping and/or further field review. A brief response to comments is found at the end of this EA under Agencies and Persons Contacted. Some concerns were outside of the scope of this analysis or resolved through previous decisions. In many cases, adjustments to the design of the Proposed Action resolved concerns. The following concern with the Proposed Action could not be resolved and provides the basis for the design of Alternative 3 in this EA.

- The location proposed in Alternative 2 for the toilets does not meet State water quality regulations and would require a variance. The proposed toilet location is within about 80 horizontal feet of the lake shore which is less than the 100-foot distance State regulation requires to protect water quality. The proposed location is also at an elevation that would require about two feet of fill to meet State recommendations. Given the flooding events at Mendenhall Lake, there is a concern that a toilet at this location could affect water quality.

## Description of Alternatives

Three alternatives were considered for this analysis, Alternative 1 - No Action, Alternative 2 - the Proposed Action, and Alternative 3.

### Alternative 1 - No Action

The No Action alternative would result in no change to the existing facilities and management in the West Glacier Spur Road area. The existing road, facilities, and uses would continue in the area. The undesirable conditions described under Purpose and Need would be expected to continue. Maintenance would continue, but no additional ground disturbing activities would occur.

### Alternative 2 - Proposed Action

The scoping letter sent in February, 2014 included a preliminary description of the Proposed Action for this project; that letter provided the basis for the actions described here. The Proposed Action has been refined and adjusted to incorporate some of the suggestions and recommendations made by the public during scoping, to incorporate additions or adjustments to improve public health and safety, function, and enjoyment, to reduce impacts to fish, and to further explain the proposal. These changes are important to understanding and explaining the project.

The Proposed Action is designed to meet the purpose and need for the West Glacier project and the project-specific desired conditions shown in the Purpose and Need section of this EA. The Proposed Action includes all Best Management Practices, Design Elements, Mitigation Measures, and Monitoring described below. Permits would be required as described under Permits and Other requirements. A map and diagram of the Proposed Action (Figures B and C) are at the end of this chapter.

In this refined Proposed Action, small adjustments were made to the proposed parking lot locations and site designs. Figure B shows slight adjustments in the location and dimensions of the parking lots, and Figure C was added to better show the parking at Tolch Rock Trail. A vault, water valve, and waterline

location change was added to the Proposed Action to notify the public of this adjustment. The location of the gate was adjusted slightly to help assure that visitors can turn off at an existing road when the gate is closed. Minor adjustments are proposed to the entrance to Tolch Rock Trail to allow for skiing and grooming of ski trails. The proposal to add seating rocks, shown on the original Proposed Action map but missing from the description, was added to the written description. The proposal for signs was clarified to include interpretive signs. The “kiosk” originally shown on the scoping map is an information and trailhead sign; the new map (Figure B) notes that this sign is a trailhead sign.

To address the concerns and improve the site in the West Glacier Spur Road area the Juneau Ranger District proposes to:

- Construct additional parking, adjust or replace existing barriers, and paint parking lines at Skater’s Cabin and Tolch Rock Trail; the Proposed Action includes reconstructing existing parking to bring it up to standards for vehicle length and accommodate snow removal.
- Install a gate - the gate will be used to temporarily close the road for emergency and administrative needs;
- Construct a 0.4 mile bike and pedestrian trail extension to separate bike tours, cross-country skiing, and other pedestrian use from vehicular traffic. The trail would cross West Glacier Spur Road near Skater’s Cabin, go a short distance perpendicular to the road, then turn north and parallel the road, and rejoin West Glacier Spur Road at its terminus. Bike racks, available to all users, would be installed at the terminus. The trail will be built to a standard that could allow grooming for skiing during winter;
- Adjust the Tolch Rock Trail to allow for skier access to the new groomed bike path from the Tolch Rock Trail parking lot. This would mainly involve removing some branches from trees to allow more snow cover in winter and moving or changing the rocks at the trail entrance to allow for access by a grooming machine.
- Move an existing vault, water valve, and waterline 30 feet further east to the east side of the bike path and above ground. The waterline would be routed under the paved bike path.
- Install a six-unit vault outhouse at the road’s terminus;
- Connect the outhouses to the paddle craft launch area with fully accessible paths to meet standards;
- Construct a spur trail, about 200 feet long, from the West Glacier Trail to the shore of Mendenhall Lake to provide a hardened site where visitors and commercial users can view the lake and glacier at higher water levels;
- Install rocks for seating at locations near the lake; and
- Fabricate and install directional and informational signs, including 2 or 3 interpretive signs near Skater’s Cabin, West Glacier Trailhead and Tolch Rock Trail.

Ski trail grooming on the new trail and on the portion of Tolch Rock Trail that provides access to the new trail is an action connected to this project. Grooming will likely be accomplished through an agreement with a local skiing group.

Ongoing maintenance of the site, including some tree and brush trimming or removal, grading and maintenance of trails, and structure maintenance, would occur and would continue.

### **Time and Duration of Activity**

Implementation is expected to begin in 2015 and last up to 2 years. We expect temporary blocks and traffic control during construction, but we intend to continue to provide access during construction.

### **Alternative 3**

The IDT visited the site several times and reviewed scoping and internal comments. One concern with the Proposed Action related to water quality was identified as described in the Unresolved Concerns section above. Alternative 3 is very similar to Alternative 2, but was designed to resolve the identified concern while meeting the purpose and need for the West Glacier project. Alternative 3 includes all

relevant Best Management Practices, Design Elements, Mitigation Measures, Monitoring, and permit requirements described below. A map of Alternative 3 (Figure D) is at the end of this chapter.

In Alternative 3, the Juneau Ranger District proposes to:

- Take the actions proposed in Alternative 2 (the Proposed Action) in all ways except that the 6-hole toilet would be installed further from the lake shore and at a slightly higher elevation than the current proposed location and accessible pathways would be installed from the boat launch and West Glacier Trail (see Figure D). \*

\*A shoothouse for a rifle range once stood in this location. Among other uses, the range was used during WWII by the U.S. Army. Therefore, the soils at this location may contain concentrations of heavy metals. Use of this site would require contaminant testing and potentially remediation.

## **Best Management Practices, Design Elements, Mitigation and Monitoring**

### **Best Management Practices**

Project design and implementation will adhere to the following Best Management Practices (BMPs) and site-specific design elements to avoid or reduce impacts of the Proposed Action.

*12.5 Wetland identification, evaluation, and protection* - Identify wetland functions and value, and provide appropriate protection measures designed to avoid adverse hydrologic impacts. This is an administrative and preventive practice. A Wetland Determination (delineation and classification) will be made prior to land disturbing activities for this project.

*12.6 Riparian Area Designation and Protection* - Special attention shall be given to land and vegetation approximately 100' from the edges of all perennial streams, lakes, and other bodies of water. No management practices causing detrimental changes in water temperature or chemical composition, blockages of water course, or deposits of sediment shall be permitted within these areas which seriously and adversely affect water conditions or fish habitat.

*12.8/12.9 Hazardous Waste Prevention and Pollution Contingency Plan* - Any fuels required to operate equipment needed for the project (chainsaws, generators, backhoes, fuel drums, etc) should be stored as far away from ponds, creeks, and wetlands as feasible. Contractors should follow the guidelines in the Soil and Water Conservation Handbook (1996) regarding storage and servicing/refueling of oil and hazardous substances.

*12.17 Revegetation of Disturbed Areas* - Provide ground cover to minimize soil erosion. This practice is used to stabilize the surface of disturbed or barren areas by establishing vegetation. Site-specific erosion control plans will be developed by the contractor and the Contracting Officer.

*13.16 Stream Channel Protection* - Project design and construction activities will not interfere with natural flow regime or channel integrity. Riparian buffers will be maintained to filter sediment and other pollutants.

*14.2 Location of Transportation Facilities* - Ensure soil and water resources protection measures are considered when locating roads and trails. Avoidance of sensitive or fragile areas is a primary consideration incorporated into the location of transportation facilities. Avoid riparian areas, wetlands, and floodplains to the extent practicable.

*14.3. Design of Transportation Facilities* - Incorporate site-specific soil and water resource protection measures into the design of roads and trails. The trail should be designed to meet safety requirements and minimize soil movement and sedimentation. Trails should be designed to drain with the appropriate use of drainage structures.

*14.5 Road and Trail Erosion Control Plan* - Develop Erosion Control Plans for road or trail projects to minimize or mitigate erosion, sedimentation, and resulting water quality degradation prior to the initiation of construction and maintenance activities. Ensure compliance through effective contract administration and timely implementation of erosion control measures.

Sedimentation is minimized by effectively planning for erosion control. Roads and trails require a variety of erosion control measures. Many erosion control practices will not only protect water quality, but also maintain road prism integrity and reduce maintenance costs, and improve usability.

*14.6 Timing Restrictions for Construction Activities* - Minimize erosion potential by restricting the operating schedule and conducting operations during lower risk periods.

*14.9 Drainage Control to Minimize Erosion and Sedimentation* - Minimize the erosive effects of concentrated water flows from transportation facilities and the resulting degradation of water quality through proper design, and construction of drainage control systems. Stabilizing the road prism and adjacent disturbed areas to minimize degradation of water quality from sediment generated by the erosive effects of surface runoff.

*14.12 Control of Excavation and Sidecast Material* - Erodible material will not be deposited in surface waters. End-haul away from site as designated by the Forest Service Administrator.

*14.14 Control of In-Channel Operations* - Remove any construction-caused debris from the unnamed Class I stream immediately in a manner that will cause the least disturbance to the streamcourse. This would pertain to any potential trees being accidentally felled into the creek to develop a crossing structure.

*14.17 Bridge and Culvert Design and Installation* - Structures shall be designed to minimize streambed and stream bank erosion to maintain water quality and fisheries resources. Bridges and bottomless arches are preferred structures on Class I and II streams.

*14.18 Development and Rehabilitation of Gravel Sources and Quarries* - Minimize sediment from borrow pits, gravel sources, and quarries, and to limit channel disturbance from gravel sources permitted for development within floodplains.

*16.1 Recreation Facilities Planning and Location* - Protect soil and water resources through appropriate planning, design and location of recreational facilities. Wetlands, meadows, and stream banks are particularly susceptible to damage from foot traffic and need special attention when constructing trails, campsites, and cabin sites. Trails are also susceptible to erosion from runoff that increases when hikers make shortcuts off the main trail (See BMP 16.4).

*16.4 – PRACTICE: Trail Construction and Maintenance* - Minimize soil erosion and water quality problems originating from trails and their drainage structures. Use standard engineering practices (see BMP 14) that include location, construction, maintenance, restriction of use, relocation, and so forth. A variety of techniques can be used to harden trails and campsites in wet areas, and to reduce erosion on hillslopes. Techniques include:

- a) Turnpiking
- b) Surface or subsurface puncheon
- c) Overlay on filter fabric
- d) Boardwalks
- e) Water bars
- f) Railings
- g) Public Education/Interpretation

Each District will develop a trail maintenance plan that determines level, timing, and frequency of maintenance.

## Design Elements

In addition to BMPs, the following site-specific design elements will be used in project design and implementation to avoid or reduce impacts of the Proposed Action.

- 1) If an active goshawk nest is discovered within 600 feet of any project activities, a seasonal closure from March 15 to August 15 will be enforced on activities that create “continuous disturbance likely to result in nest abandonment”.
- 2) In accordance with the Forest Plan standards and guidelines, if a new eagle nest is discovered, the Forest Service would follow the US Fish and Wildlife Service National Bald Eagle Management Plan, and avoid habitat alterations and disturbance (including repeated human activity) within 330 – 660 feet of all bald eagles nests.
- 3) Avoid ground disturbing activities along the lake shore for boat launch improvements from mid-March to mid-June. This will minimize impacts to vulnerable juvenile salmonids and Dolly Varden char travelling along the shoreline during their outmigration.
- 4) When designing the bike route, avoid low spots in the terrain which frequently have standing water and could provide temporary habitat to fish on a seasonal basis.
- 5) Avoid disturbing the riparian habitat located immediately upstream of the proposed bike trail crossing site. The stream meander features in this area normally contain higher quality rearing habitat for salmonids and Dolly Varden.
- 6) Avoid instream work for bridge construction along bike trail route from mid-March to June 1. This will minimize impacts to vulnerable juvenile salmonids and Dolly Varden moving downstream during their outmigration.
- 7) Maintain the ditch around the parking area across from the Skater’s Cabin. It is identified as and functions as a wetland.
- 8) Use coconut fiber (coir) matting for erosion control as an alternative to straw bales when available and practical.
- 9) Avoid spreading invasive plants by ensuring road and trail materials are free of invasive plant seeds and/or parts.
- 10) Prevent invasive plant establishment during construction by washing tools and equipment prior to first entering an uninfested area, or when re-entering an uninfested area from an area infested by invasive plants.
- 11) Areas suitable for staging construction materials and equipment will be identified on-site.
- 12) This area contains known historic properties. To avoid effects to these properties:
  - any changes to the planned bike path – including changes in the width and adjustments in alignment – will be subject to further review by an archeologist; and
  - an archeologist shall be consulted for the following proposed components of the project: a. the exact location of the gate, b. the new locations for the vault, water valve and waterline, c. the final design for the “deepened” parking area at Skaters Cabin, and d. the new (Alternative 3) location of the toilets and toilet access trails.
- 13) If a previously unidentified archaeological or historic site(s) is encountered, the contractor shall discontinue work in the general area of the site(s) and notify the contracting officer immediately. The contracting officer will notify a Forest Service archeologist to determine further action.
- 14) If any previously undiscovered endangered, threatened, proposed, or sensitive species or key habitats for any MIS or other species identified in this document are encountered at any point in time prior to or during the implementation of this project, or a District Biologist would be consulted and appropriate measures would be enacted.
- 15) New and redesigned Federal facilities must meet accessibility standards as outlined for outdoor recreation areas in the USDA publication, Accessibility Guidebook for Outdoor Recreation and Trails (Aug 2012, 1223-2806P-MTDC) and the Forest Service Outdoor Recreation Accessibility Guidelines. This project was designed to meet those standards. Each site feature in the Proposed

Action will be selected or designed to provide accessibility to the greatest extent practicable within its given setting.

- 16) Project elements should be sited and designed to “borrow from naturally occurring patterns in the landscape” and materials and colors should be selected to “blend with those found in the natural surroundings.” (USDA 2008, p. 4-58). To meet that direction, we will adopt and be consistent with the color theme of the Mendenhall Glacier Recreation Area.

### **Mitigation Measure**

The following mitigation measures will be used to reduce impacts of the Proposed Action:

- 1) Work with district fisheries personnel to install block nets and trap and remove fish using the ditch near the proposed parking lot area during construction and from the proposed bike trail crossing structure site during construction. This will minimize direct impacts to resident and rearing fish from mechanized damage and excess siltation during ground disturbing activities.
- 2) Minimize stream crossings with motorized equipment. Use temporary planks during construction where feasible to minimize damage to the stream channel and stream banks.
- 3) Have a soil scientist on-site during outhouse excavation for Alternative 3 to determine presence of heavy metal contaminants. This person should coordinate with the DEC to develop an approved plan for the removal and disposal of contaminated soil before work should continue.
- 4) Revegetate bare soil resulting from project activity if prompt natural regeneration is not expected. Use native material when available. See current seeding guidelines (FSM 2080 TNF Supplement, Exhibit 2) for detailed procedures and appropriate mixes.

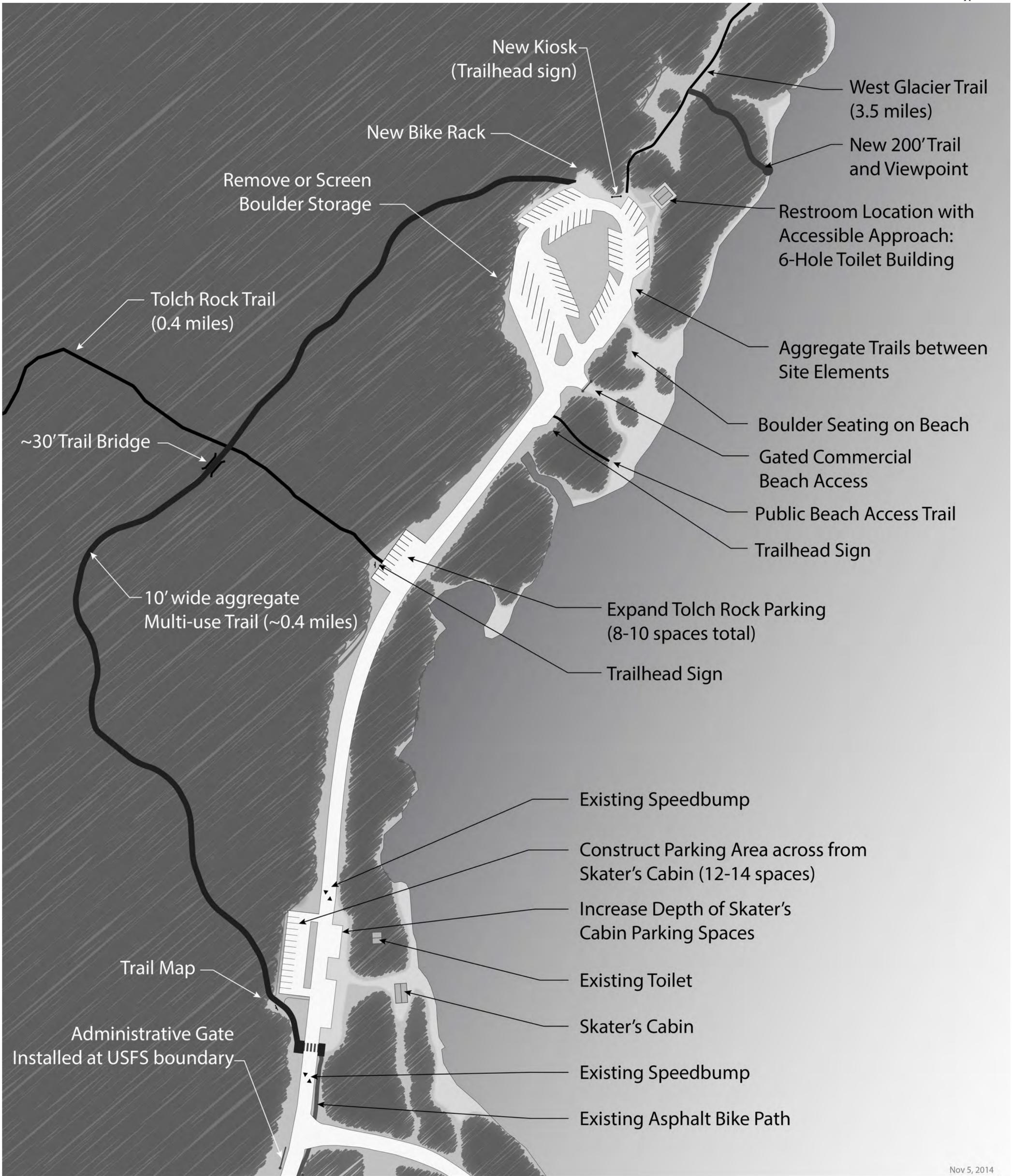
### **Monitoring**

The following monitoring is expected to occur to assure that effects are limited.

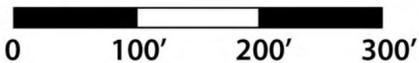
- 1) This area contains known historic properties. To avoid effects to these properties, when under construction, the bike path, gate, vault/water valve/waterline, “deepened” parking area at Skaters Cabin, and the new (Alternative 3) location of the toilets and toilet access trails shall be periodically monitored by an archeologist.
- 2) When possible, inspect areas where gravel or other materials (including seed) have been imported for 2-3 years afterwards to ensure no invasive plants are present. See item number 10 in FSM 2080 TNF Supplement, Exhibit 1.

### **Permits and Other Requirements**

The Alternative 2 location for the toilets does not meet State water quality regulations and would require a variance. Because of the potential for heavy metal contamination at the Alternative 3 toilet site, use of this site would require contaminant testing and potentially remediation. The Forest Service would obtain concurrence from Alaska Department of Fish and Game for any in-water work in fish bearing streams, including bridge replacement and culvert removal. A Nationwide Permit for wetlands will be required from the U.S. Army Corps of Engineers for the fill needed along the trail and in the parking lot.



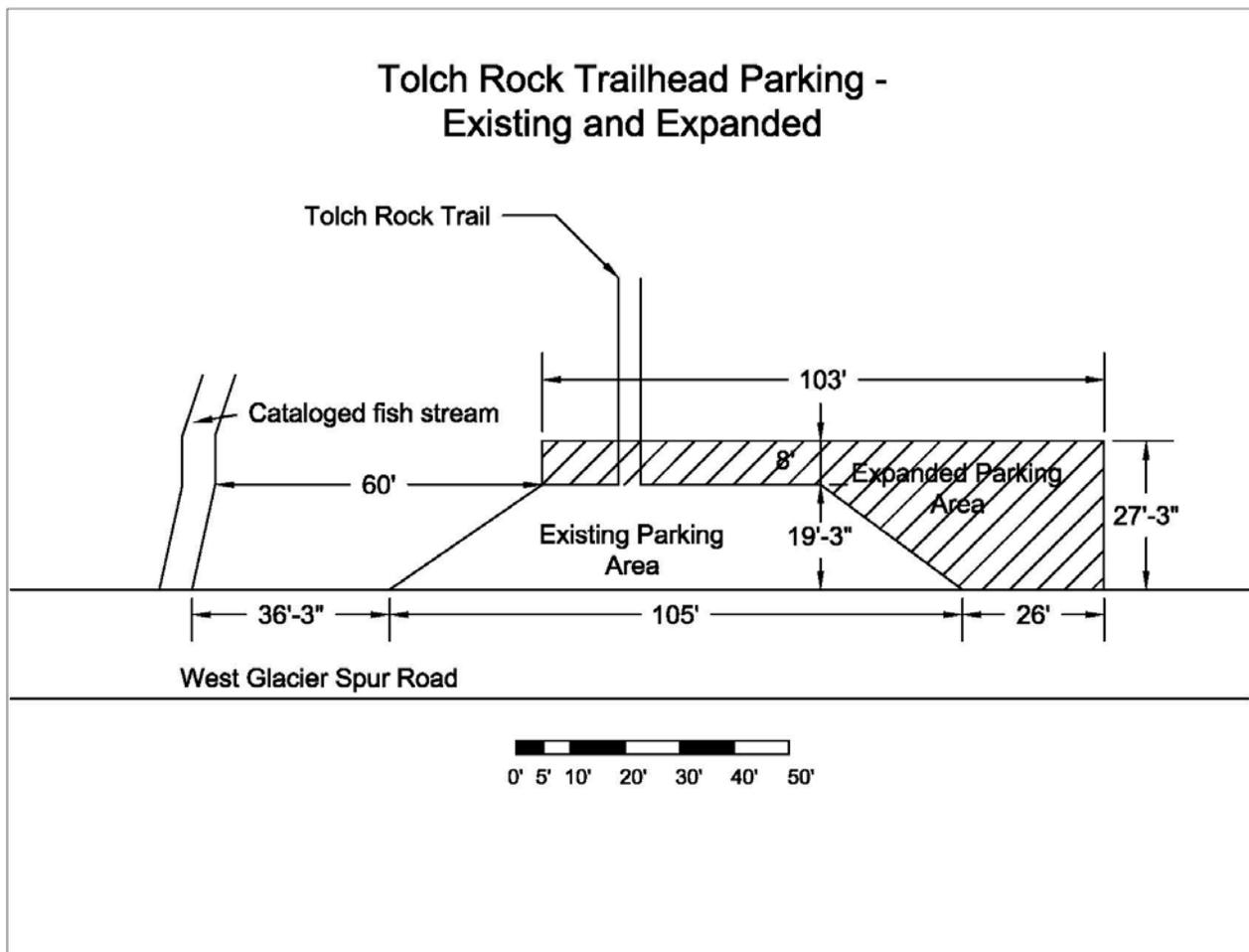
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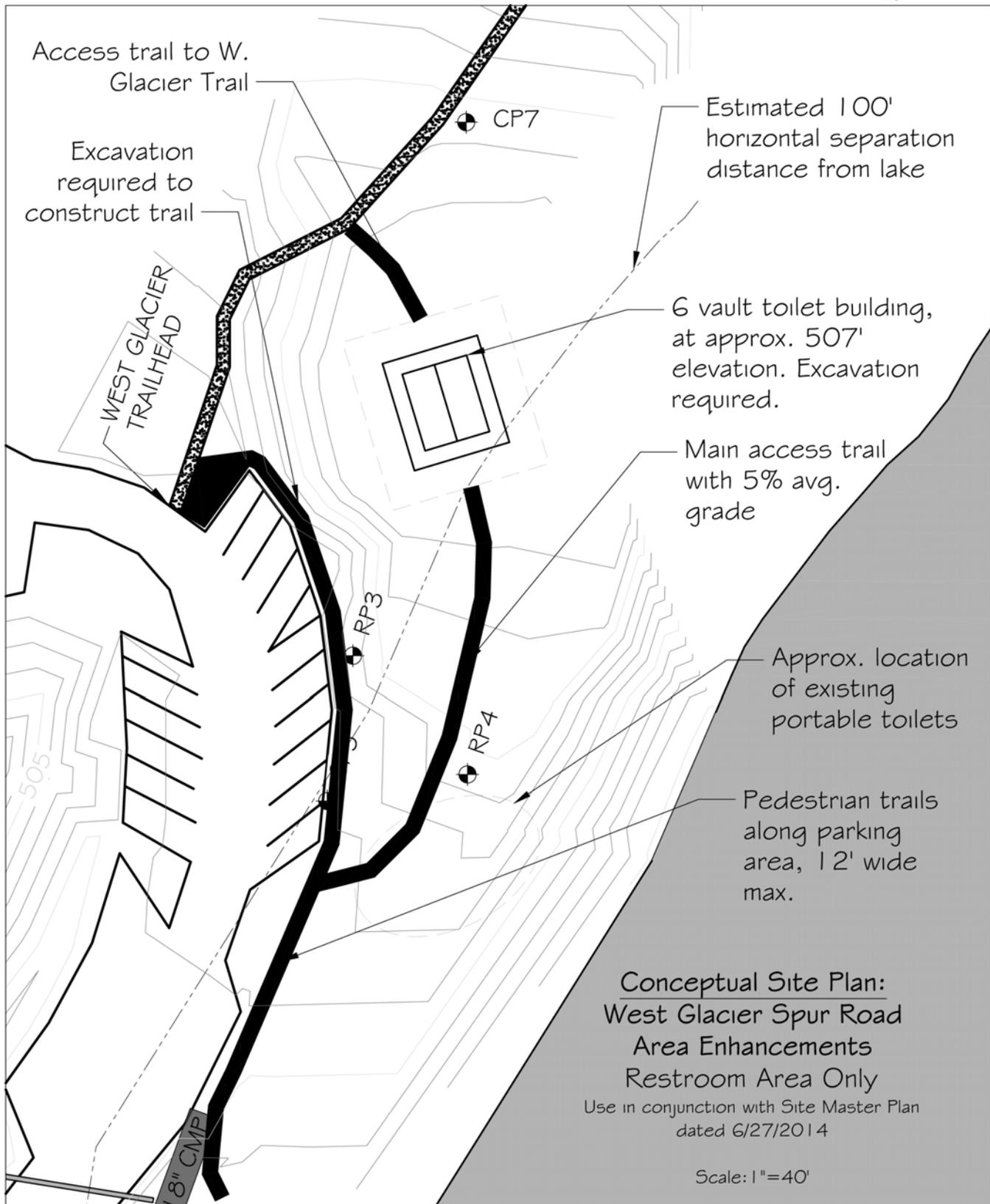


**Figure B: Alternative 2, Proposed Action  
West Glacier Spur Road Enhancements**

Juneau Ranger District, Tongass National Forest

**Figure C: Tolch Rock Trailhead Parking – Existing and Proposed Location in Relationship to a Nearby Fish Stream**





**Figure D: Alternative 3 Toilet Location  
West Glacier Spur Road Enhancements**

Juneau Ranger District, Tongass National Forest

## Environmental Impacts of the No Action and Proposed Action Alternatives

The direct, indirect and cumulative environmental impacts of the No Action and Proposed Action Alternatives are described below. The discussion focuses on resources most likely to be affected by the alternatives. Resources affected are listed alphabetically. The effects on resources other than those discussed here were analyzed and are available in resource reports in the project record.

### Botany

**Alternative 1, No Action** – The No Action Alternative would not affect botanical resources. No additional ground disturbance would occur. No threatened or endangered plants occur in the area. No sensitive or rare plants were found in the area during surveys. Current infestations of invasive plants, at least 17 species, would not likely spread into undisturbed areas and the current infestations consist of species that are not high priority for control.

**Alternative 2, Proposed Action** – No threatened or endangered plants will be affected since they do not occur in the area. Since a survey was conducted at the proper time of year, and no sensitive or rare plants were found, the project as described will not adversely affect any sensitive or rare plants. The proposed activities have the potential to affect the introduction and spread of invasive plants. There is a moderate risk of spreading invasive plants under this alternative. Construction of additional parking could cause new infestations or spread of existing infestations by exposing mineral soil or importing propagules from road materials or tools and equipment, although the risk of spread is likely to be limited to areas near current parking. Some clearing of vegetation will be necessary to construct the proposed bike/pedestrian trail lakeshore viewpoint, and parking area vault toilets, which may allow existing infestations to spread into these areas. The proposed trail and viewpoint could serve as vectors for spread of existing invasive plant infestations. However the current infestations consist of species that are not high priority for treatment on the Tongass National Forest (FSM 2080 TNF Supplement, Exhibit 3). Design elements and mitigation should greatly reduce the risk of introduction and spread of invasive species.

**Alternative 3** – The effects of Alternative 3 would be similar to those shown under Alternative 2. More clearing would be needed for the new toilet location.

**Cumulative Effects** – An existing paved road and hiking trails are present in the project area. The project area has been and continues to be subject to heavy recreational use. Under the No Action Alternative there would be no change in the existing conditions. Current infestations would remain but not likely spread into undisturbed areas. In the Proposed Action and Alternative 3, infestations could spread into areas of ground disturbance unless appropriate mitigation measures are implemented. Over time, increased visitor use of new infrastructure could increase the risk of transporting invasive plant propagules into new areas and causing new infestations.

### Fisheries and Watershed

**Alternative 1, No Action** – If no action is taken to make improvements to the West Glacier area, no effects to fisheries or aquatic resources are expected. Existing conditions for fish and aquatic resources in the area are considered robust and do not currently require any specific attention regarding protection or restoration. Therefore, no action on this proposal would result in no effect to the resource.

**Alternative 2, Proposed Action** – The Proposed Action would result in minor<sup>1</sup> adverse effects to water resources in the form of sedimentation and substrate disturbance. These effects are minimized through the implementation of design features such as erosion control plans. The effects are not expected to result in degradation of water quality, alter water quantity, nor affect any beneficial use of the water. The proposed activities are covered under Nationwide Permit #27 pertaining to Section 404 of the Clean Water Act.

No Federal or State listed or proposed threatened and endangered fish species occur on the Juneau Ranger District. No State species of special concern occur on the Juneau Ranger District as well. With a recent de-listing of species, there are no longer any recognized sensitive fish species located within the Tongass National Forest. Thus no threatened or endangered, species of concern or sensitive fish species will be affected. With implementation of the design features and BMPs described above, minor impacts to aquatic resources are anticipated to complete this activity.

The outhouses are located approximately 80 feet from the lakeshore (50-60 feet from mean annual high water level) and polyethylene or concrete vaults will be used to contain waste material. The vaults would be raised with a berm to reduce the probability of flood water infiltrating the toilet facility, and reduce the probability of wastewater contaminating the environment. The vaults will be serviced at regular intervals, and no leach field is needed for this improvement. To meet State standards and Forest Service manual direction, Region 10 BMP's require toilets to be located a minimum of 100 ft from perennial lakes to protect water quality. A variance from the State would be required. Due to the insufficient distance from a water body, minor impacts to aquatic resources are anticipated to complete this activity. This location is not suspected of containing soil contaminants from the historic shooting range in the area, so no effects from heavy metals are expected. In discussion with Alaska Department of Environmental Conservation the location and design in Alternative 2 is expected to provide adequate protection to water quality and would likely meet variance requirements.

With the absence of aquatic habitat in the immediate vicinity, negligible impacts to aquatic resources are anticipated to complete the viewpoint trail from the West Glacier trail to Mendenhall Lake beach. The clearing area is generally flat and the substrate consists of existing shoreline gravels. The trail would not cross any Class I-IV streams and would be located as to avoid any wetlands along the route.

The Skater's Cabin parking lot development will fill a 3,900 square foot (0.09 acres) clearing of mature forest land including some forested wetlands. An existing ditch running along the west side the road is connected via a culvert to Mendenhall Lake and is accessible to salmonids and Dolly Varden char throughout the year. Although not officially considered a Class I stream, the ditch does provide seasonal rearing habitat for juvenile coho salmon and Dolly Varden. The parking lot would require the installation of approximately 30 ft of culvert in the ditch to connect with the road. If set correctly, the culvert would not impede salmonid movement, but the work would likely generate temporary sediment disturbance in the waterbody. As a result, minor impacts to aquatic resources are anticipated to complete this activity.

Tolch Rock Parking expansion will fill a 3,569 square foot (0.08 acres) clearing of mature forest land. The expansion will increase the depth of the existing lot by 8 ft. A nearby Class I stream runs parallel to the lot, but no development will occur in its direction (see Figure C in this EA). At the widest point of the lot, the current 36 ft forest buffer will remain undisturbed. The project area is flat with little or no potential for erosion towards the stream. As a result, negligible impacts to aquatic resources are anticipated to complete this activity.

Bike trail development will require clearing approximately 27,560 square feet (0.63 acres) of forested land including a mixture of wetlands along the proposed route. The route would avoid low spots in the terrain which frequently have standing water and could provide temporary habitat to fish on a seasonal

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<sup>1</sup> Minor: Effects would be measurable, although the changes would be small, localized to the site or affected stream reach, and last less than a week.

basis. Gravel fill would be used to create a 10 feet wide path along the route. Small diameter plastic culverts will be utilized to pass water where wetland areas are unavoidable and set in a manner to support the seasonal movement of fish. This trail would cross a single Class I stream (#111-50-10500-2019) before connecting with the existing West Glacier trail. Maintaining connectivity between the stream and the wetland areas will be necessary to avoid impacting the natural movement of fish. The proposed crossing structure would consist of concrete sill abutments set 10 feet back from the active channel using treated timber stringers, decking and bull rails. This stream provides rearing habitat and possibly occasional spawning habitat for coho salmon and Dolly Varden. The stream type, Narrow Placid Flow (palustrine process group) lacks spawning habitat and generally makes these channels less sensitive to sedimentation impacts and somewhat resistant to erosion. Bank degradation can still occur from heavy foot traffic. Management prescriptions emphasize wetland protection and control of potential erosion sources (see BMPs in this EA).

Moderate<sup>2</sup> effects could occur with the potential alteration of surface water movement in the wetlands areas, but would not be considered significant. A crossing structure designed to sufficiently span the active channel width would be critical in avoiding major impacts to fisheries and watershed resources. This would require the crossing structure abutments to be installed well outside the stream bankfull channel to avoid restricting natural stream movement over time or during periods of high flow. Abutments set at an insufficient span could cause stream incision and bank erosion which would negatively affect fisheries and watershed resources.

Minor sediment disturbance would be expected during trail and bridge construction, primarily impacting rearing fish. These disturbances would be temporary in nature and primarily involve activities occurring within the active stream channel (foot and machine traffic across the stream or in wetted areas). Proper use of silt fencing around the bridge site during installation and avoiding instream/bank disturbance work during periods of high stream flow will be necessary to minimize sediment impacts to aquatic resources.

**Alternative 3** – Alternative 3 is similar to Alternative 2 in all ways except that the 6-hole toilet would be installed a minimum of 100 ft from the lake shore and at a slightly higher elevation than the current proposed location. By moving the outhouse further from the Mendenhall Lake shore, State standards and Regional BMP's will be met, minimizing sanitation effects to water quality. However, the selected location may contain elevated levels of heavy metals in the soil from the historic shooting range found in the vicinity. Even with a 100 ft buffer, disturbance of sub-surface concentrations of heavy metals would greatly increase the potential to impact nearby aquatic resources. If significant concentrations of heavy metal are detected during excavation, the Department of Environmental Conservation (DEC) may be required to review and approve a clean-up and disposal plan before work could continue. There is the potential in Alternative 3 to improve the long-term soil and water quality at the site if any soil contaminants exposed during the excavation process are removed. Assuming all BMP's can be met, negligible impacts to aquatic resources are anticipated to complete this activity.

**Cumulative Effects** – The cumulative effects of Alternatives 2 and 3 would be very similar, though Alternative 3 is slightly less due to the outhouse vault being further from the lake shore. There is potential for increased streambank and wetlands habitat disturbance over time if the trail and infrastructure improvements encourage increased use by both public and private entities. Increased human traffic doesn't guarantee increased resource damage. However, active trail management techniques may be required to regulate and minimize human disturbances within the Class I streamcourse, in wetlands areas, and along the Mendenhall Lake shore.

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<sup>2</sup> Moderate: Effects would be measurable at the stream reach or subwatershed scale, and last more than a week.

The nearby Tolch Rock Trail has an existing bridge across the same Class I stream discussed above. The proposed action would create a second crossing on this stream, further increasing the potential for impacts to aquatic habitat.

### **Essential Fish Habitat**

Fish impacts may result if the project affects critical, unique, or limiting habitats used for spawning, rearing, feeding, migration, etc. The National Marine Fisheries Service defines essential fish habitat (EFH) as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. “Necessary” means the habitat required to support a sustainable fishery and a healthy ecosystem; and “spawning, breeding, feeding, or growth to maturity” covers a species full life cycle. The affected area does not contain unique habitat, nor is it considered to be limited in availability. The Proposed Action and Alternative 3 will not increase the potential for resource impacts and adverse effects to EFH are not anticipated. In the opinion of the Forest Service, there will be no adverse effects to EFH and the fishery will not be impacted such that sustainability or ecosystem health would be impaired.

### **Heritage**

**Alternative 1, No Action** – Under the No Action alternative, there would be no direct effects to either of the historic properties (Skater’s Cabin or the West Glacier Trail) in the area of potential affect. Three sites important in terms of local history but determined in consultation with the Alaska State Historic Preservation Office (SHPO) to be ineligible for the National Register of Historic Places due to inadequate integrity or being in a category of property exempted from the National Register (Mendenhall Rifle Range, the Mendenhall Lake trail and the Tolch Rock Commemorative site) would not be affected.

Given that the planned interpretive signs, along with other area improvements, would not be implemented, the anticipated beneficial effects of public education and the hoped for increased interest in and concern for historic properties in general, and those directly in the area of potential affect, would not be realized. Currently one to two incidents of vandalism occurs per year at Skaters Cabin and this would likely continue.

**Alternative 2, Proposed Action** – In addition to the historic properties (Skater’s Cabin or the West Glacier Trail), there is at least one other cultural resource on the west side of Mendenhall Lake that has yet to be fully inventoried and evaluated as it is not currently in the area of potential affect.

Design Features in this EA will ensure that the project will have No Adverse Effect to properties eligible for inclusion on the National Register and that heretofore undocumented properties are not inadvertently disturbed. Under this alternative, there will be no direct effects to either of the historic properties. There may be indirect beneficial effects of the interpretive signs as there may be an increase in interest in and concern for historic properties in general, and specifically those directly in the area of potential affect.

The three remaining known and documented cultural (or “heritage”) sites in the project area are important to local history but are ineligible for the National Register (Mendenhall Rifle Range, the Mendenhall Lake trail and the Tolch Rock Commemorative site). Effects on these sites would be minimal.

**Alternative 3** – Most effects would be the same as in Alternative 2. Under this alternative, there will be no direct effects to properties that are eligible for, or listed on, the National Register. However, the vault toilet is proposed atop the mound on which the CCC era Rifle Range shoothouse once sat. Through consultation with SHPO, agency specialists reached the conclusion that the site lacks adequate integrity to be eligible for inclusion on the National Register, and consequently, the agency’s obligation under the National Historic Preservation Act to consider effects is met: technically there will be “no effect” on historic properties. However, the proposal will result in detrimental alteration to an area where a structure, representative of an important era in our history, once stood. Thus, related to heritage resources, this alternative is considered less desirable than Alternative 2. Additionally, there is the lack of

known documentation regarding how the shoothouse was removed. Consequently, it is not clear to what extent subsurface materials are present. If substantial buried materials are discovered during excavation for the toilet or the trail, the National Register status of the property will have to be reconsidered, requiring a call to stop work in progress and consultation with SHPO.

**Cumulative Effects** – Past project reviews have often stipulated that information regarding the unique history of Skaters Cabin be posted near the cabin, or be made available by other means, in hopes that incidents of vandalism – a repeated and frustrating problem over the years - would be reduced. To date, however, little has been done to meet this need. Under the No Action Alternative, cumulative effects could occur due to the continued lack of public outreach. Incidence of vandalism would likely continue and perhaps increase.

In all alternatives, cumulative effects could occur if project dollars for maintenance of recreation facilities on the Tongass National Forest – including the two National Register eligible properties within the project area - continue to fall. Adverse effects – particularly to Skaters Cabin - can also be anticipated if the Department of Transportation’s tentative plans to raise the main West Glacier access roadbed by 18” to reduce flooding risk were to be implemented. The road prism would likely need to be wider, probably necessitating adjustments to the Skaters Cabin parking areas in excess of what is proposed here. Were DOT’s tentative plan to be enacted, another Section 106 Review for effects to historic properties would be required.

## Recreation

**Alternative 1, No Action** – Under the No Action Alternative the West Glacier Spur Road area would remain in its current configuration. Congestion and safety hazards from traffic would continue. Safety hazards from flooding would remain and be difficult to manage. Demand for parking would continue to be exceeded on many winter days and snow removal would continue to be difficult at Skater’s Cabin. In the event of a pressure drop in the water system, untreated water may enter the water system because the anti-siphon valve does not function when it is under water. Such an event would be unhealthy and potentially unsafe. Facilities would remain inaccessible to some users. Unsightly and expensive-to-operate toilet facilities would continue at the site. Vandalism and the costs it incurs would likely continue. Dedicated funding would not be used and would not be available to other projects.

**Alternative 2, Proposed Action** – In the near term, the Proposed Action may result in some disturbance to recreational activities during construction; crews and equipment will be present and access to the area will be partially or temporarily restricted for public safety reasons. However, these effects are not expected to result in prolonged recreational user dissatisfaction because the disturbance is expected to be completed within two years. Because the blocks and closures are intended to be short-term and temporary, there is a minor negative effect due to construction.

In the long-term, under the Proposed Action the West Glacier area would provide a healthier and safer location for all users, a more barrier-free, accessible location and would provide a higher quality recreation experience for all users.

With construction of the bike and pedestrian path, some bike and pedestrian traffic may shift to the trail, reducing the congestion and mixing of use types on the road. This is expected to improve user safety in the area. We expect an increase in the number of skiers in the West Glacier and Tolch Rock Trailhead areas. With grooming, we expect many people to use the new 0.4 mile trail and the Tolch Rock Trail from the parking to the connection of the new trail for skiing. Parking capacity would be increased both through added/expanded parking and by providing the opportunity to ski (and walk and bike) on groomed trails from the parking at West Glacier Trailhead or Tolch Rock Trailhead. While demand for parking may still exceed capacity on the highest use days, capacity for parking would better provide for the need on more days by providing more parking and spreading the parking load to other parking lots. Bike

parking would be available at the West Glacier trailhead for everyone to use. Based on low past use and no intention to groom the remainder of Tolch Rock Trail, increased use of this trail is not expected.

With the ability to close the gate, Forest Service personnel could better protect public safety as they would be available to do standard duties like cut and remove hazard trees or emergency duties, such as evacuating people from the campground, without having to staff or patrol the closure.

By moving the City of Juneau water system valve we will protect public health and safety by preventing untreated water from entering the city water system in the event of a pressure drop in the water system.

Recreation demands are expected to be better met under the Proposed Actions. Toilets and outhouses would be more attractive and more accessible and serviced at a much lower cost. While only one or two toilets may be open in the winter, this would adequately provide for the need during the winter. Materials used for the outhouses will be vandalism-resistant, reducing costs, but will better meet the desired scenic conditions in the area. Because of limited choices in 6-hole outhouse designs, the structure may have an internal “hallway” which could draw unwanted use by people seeking shelter. Locking doors or other management could occur if problems arise.

The user created trail to the lake would be hardened making it easier to use and users would be less likely to compete for space along the shoreline of Mendenhall Lake, especially at high water levels when people cannot walk on the beach because more access sites would be available.

Interpretative messages may help to improve users experience and reduce vandalism of historic sites.

Funding through Federal Lands Access Program (FLAP) dollars administered by the Federal Highway Administration will allow the Forest Service to renovate this site over the next few years with little expenditure by the Forest Service.

**Alternative 3** – The effects of Alternative 3 would be similar to those shown under Alternative 2. The toilets would be further from the lake and on higher ground, requiring more trail to be built up from the parking lot to meet accessibility standards. However with the construction of this trail this site would be more accessible to the West Glacier Trail than the original location. In both alternatives, the toilets would be visible from the parking lot.

Because of the potential for heavy metals at the site related to the old shoothouse, use of this site would require contaminant testing and potentially remediation. Remediation could significantly increase construction costs and the timing of implementation. Remediation costs were not included in the FLAP funding. If additional SHPO consultation and actions were needed further time and funding would be needed.

**Cumulative Effects** – Past and ongoing activities and developments in and around this area have affected recreational use in this area and will continue to do so. Glacial lake flooding has become more prevalent and increased the need for active management of the area. As described above, the ability to close the gate will improve our ability to manage the area safely. Raising the road may reduce the need for gate closures, but would also increase the size of the road and parking footprint in the area. Removal or use of the stored rock at the site may briefly increase disturbance at the site but would likely improve the look of the area.

## Soils and Wetlands

**Alternative 1, No Action** – The no action alternative would not impact any soil resources nor fill any wetlands beyond current conditions. The western shore of Mendenhall Lake is and would continue to be well-used. Away from these developed recreation facilities, the soils are in a natural state with very little disturbance. Flow from a rock pit across from Skater’s cabin changed the amount and type of water flowing in the ditch along the road. The flow coming out of the rock pit has created a constant, very deep

ditch with fast-moving water. This has allowed wetland vegetation to flourish along the banks of the ditch.

**Alternative 2, Proposed Action** – The Proposed Action will affect soils and will fill a total of 0.11 acres of wetland. A Corps of Engineers permit will be needed for the proposed activities for filling in wetlands.

Most of the proposed activities are located in uplands. In terms of soil, all of the proposed activities are dedicated uses of the soil resource, are not subject to the soil quality standards (FSM 2554), and will implement BMPs to prevent soil erosion and maintain soil quality (Appendix A, FSH 2509.22). Most trails can be rehabilitated, replanted, and returned to their natural condition. Any paved areas, such as the parking lots, are irreversible or irretrievable uses of the land.

The spur trail to the lakeshore is located on uplands but the open sedge-dominated lakeshore is wetland. There are no proposed activities here but it is likely that there will be increased pedestrian traffic here and some vegetation would be trampled

A few small areas along the 0.4 mile trail are wetlands. These are associated with streams, drainage swales, and a small palustrine area near Skater's Cabin. The proposed trail avoids most wetlands and streams, only crossing them when necessary. The trail fills and impacts 0.05 acres of wetlands.

The parking lot across from Skater's Cabin is located where the current ditch is very deep and moves a lot of water. With wetland vegetation on the banks of this ditch similar to palustrine wetland, this area classifies as a palustrine wetland. The lower half of this parking area is proposed in wetlands. About 0.06 acres of wetland would be filled to create this parking area.

**Alternative 3** – For the most part, the effects of Alternative 3 would be the same as those shown under Alternative 2. In Alternative 3, the location of the proposed toilet is in an area with likely heavy metals related to a World War II-era shooting range. The most likely heavy metal present would be lead. Most heavy metals are tightly bonded to soil particles so dust, or erosion of these potentially-contaminated soils could result in spread of these heavy metals. Testing for heavy metals may need to be conducted prior to any ground disturbing activities for this area. Depending on the results, Alaska Department of Environmental Conservation (DEC) may be required to review and approve a clean-up and disposal plan before work could continue. If heavy metals are present, a revegetation plan is necessary to keep any heavy metals on site to prevent dust and erosion.

**Cumulative Effects** – The past and present activities are not ground-disturbing activities and do not affect soils and wetlands. There is some trampling of vegetation from users but it does not affect long-term soil productivity nor wetland function. The future raising and repaving the road may substantially impact wetlands adjacent to the lake. However, the wetland delineation for this project only investigated the areas with proposed ground-disturbing activities related to this proposal and does not cover the entire length of road. Within the limited scope of this analysis, cumulative effects to soils or wetlands would be minor.

## Wildlife

**Alternative 1, No Action** – The No Action Alternative would maintain existing levels and use of wildlife habitat. Disturbance would continue to negligibly negatively affect resident wildlife. Threatened and endangered species and most sensitive species of wildlife are not being affected because they lack habitat in the area and are not present in the area. Current recreational use of the area may impact individuals, but is not likely to result in a loss of viability in the Planning Area, nor cause a trend toward federal listing for the Queen Charlotte goshawk, a sensitive species. Ongoing human uses in the area could disturb nesting and foraging goshawks. No Management Indicator Species (MIS) of wildlife or

migratory bird habitat would be altered under the No Action Alternative. Existing human uses of the area would continue. This could result in temporary disturbance and/or displacement of individuals. Most wildlife may be habituated to human presence and activities in the project area and disturbance would be localized. The effects of the No Action Alternative would be negligible.

**Alternative 2, Proposed Action** – The Proposed Action may result in some adverse effects to wildlife species, particularly Queen Charlotte goshawk, via disturbance. The proposed action would have minor effects on migratory birds and bird species of concern through disturbance, removal of some habitat, and possible destruction of some nests.

Threatened and endangered species and most sensitive species of wildlife would not be affected because they lack habitat in the area and are not present in the area. Queen Charlotte goshawk, a sensitive species, could be negatively affected in the long-term by the Proposed Action. Under the proposed action, no substantial changes to habitat quality are expected because little to no suitable nesting habitat would be removed. Some disturbance would likely occur to foraging goshawks during construction activities. This disturbance is expected to be restricted to a small portion of the overall territory and greater than 600 feet from known nests. Construction of the bike/pedestrian trail would open up a new area to regular human use, closer to a known nest/goshawk use area. Thus, there is greater potential for disturbance compared to the no action alternative. Current recreational use of the area may impact individuals, but is not likely to result in a loss of viability in the Planning Area, nor cause a trend toward federal listing for the Queen Charlotte goshawk. Ongoing human uses in the area could disturb nesting and foraging goshawks.

Under the proposed action, no to negligible wildlife MIS suitable habitat would be impacted. Few, if any, large trees would be removed but some shrub and forb cover would be removed. Individuals could be temporarily displaced during construction activities; however, these activities will be localized and occur in an area that already receives substantial human activity on a daily basis. After construction, human uses would be spread over a slightly larger area, which could increase the likelihood of disturbance or wildlife-human encounters over the no action alternative. Under both alternatives, the affected area is of sufficiently limited extent that the overall impacts to MIS are considered negligible.

The proposed action would have minor effects on migratory birds and bird species of concern. Under the proposed action, a small amount of potentially suitable habitat would be impacted by the removal of small trees and shrubs, but no substantial changes to habitat are expected. Construction work would occur during the breeding season. Individuals could be temporarily displaced during construction activities; however, these activities will be localized and occur in an area that already receives substantial human activity on a daily basis. There is a low potential for nest(s) to be destroyed during construction activities. The magnitude of the effects would vary, depending on the season, but project activities would be restricted to a small area. The greatest effects would occur during May and June. By September, the young birds have fledged and they would not be directly affected by any of the proposed activities. After construction, human uses would be spread over a slightly larger area, which could increase the likelihood of disturbance over the no action alternative.

This Wildlife Analysis Area is not within the community use area of any rural community and is not within the area from which residents of any rural community obtained approximately 75% of their average annual deer harvest (USDA FS 2008a). No significant change in deer distribution or abundance is expected to result from implementing either alternative. Access to the project area will remain unchanged. This project should not cause an increase in harvest of deer by non-rural residents over rural residents. Therefore, this evaluation concludes that both the no action and proposed action alternatives shall not result in a significant possibility of a significant restriction of subsistence uses.

**Alternative 3** – Under Alternative 3 the effects would be similar to Alternative 2 except that a few more large trees and other vegetation would be removed. Effects to wildlife would be the same as Alternative 2.

**Cumulative Effects** – The no action alternative would have no new impacts and thus, no cumulative effects. Cumulatively, the proposed action and Alternative 3 will add to the overall developed footprint and level of human disturbance in the area for goshawks and all other species that are present. All alternatives are consistent with Forest Plan wildlife standards and guidelines and thus, the conservation strategy for these species. No impacts to any species' viability are expected.

## Agencies and Persons Contacted

An interdisciplinary team of Forest Service resource specialists was consulted in the development of this environmental analysis.

The Forest Service mailed a scoping letter requesting scoping comments on this project on February 27 and 28, 2014. The letter was mailed to over 200 individuals via email and postal mail.

The Douglas Indian Association and Goldbelt Incorporated were sent the scoping letter. Government-to-Government consultation was initiated via the scoping letter. Tribes are also offered ongoing, informal opportunities to discuss and consult on this project during tribal updates. No consultation has been requested and no tribal comments have been provided to this point.

Consultation and discussion have occurred with the Alaska State Historic Preservation Office and Alaska Department of Environmental Conservation.

A public open house meeting about this and two other Juneau recreation projects was held on March 10, 2014. Approximately 40 members of the public attended the meeting to learn and ask questions about the projects.

Fifteen individuals and agencies provided comments on this project. A brief summary of the comments is included below; the full comments and brief responses are available in the project record for this project.

As discussed under Description of the Alternatives, Proposed Action, some of the comments were used to refine and adjust the Proposed Action and clarify the Purpose and Need for the proposal to incorporate suggestions and recommendations made by the public during scoping. Whenever possible, we used the comments on this project to improve the project or the analysis. For example, suggestions and requests related to the design of the project such as minimizing the removal of vegetation near the stream during bridge construction and designing the parking to avoid fisheries effects, were included as part of the Proposed Action.

Some comments were used to help us decide what information to include in the EA.

Some comments asked us to avoid developments or actions that were not discussed in the Proposed Action – such as avoid adding lighting, avoid using the gate for daily or seasonal closure, and avoid closing the road to walkers or bikers once the trail is built. In these cases, because we don't currently need nor intend to install these developments or do these actions, these items were not discussed as being part of the Proposed Action.

Some of the comments and concerns, such as the request to keep the beach access gate open or to remove the nighttime closure, relate to past decisions which will not be changed by this project or its decision. Some comments and suggestions were outside the scope of this analysis.

Some comments suggested putting the trail in different locations. The Forest Service considered several options for the trail location. The terrain and cost limited the possible trail locations. Because of the additional costs that would be incurred in addition to the high level of impact from other alternatives, the suggested alternatives were dropped from further consideration.

Some comments suggested providing other developments that were not a part of the original Proposed Action. The responsible official determined that most of these additions were not needed at this time; thus they were not added to the proposal, but may be considered in future NEPA. Other comments

suggested leaving components like the gate out of the Proposed Action. Since these items are needed to meet the Purpose and Need for the proposal, they were not removed from the Proposed Action.

Comments were also used to clarify the Proposed Action and Purpose and Need. For example, questions about the “kiosk” on the scoping map led to the clarification that this is simply a large trailhead sign.

Finally, many comments were supportive of the Proposed Action or parts of the Proposed Action.

This EA will be provided to all who commented on this project as well as to all those who remain on the electronic mailing list. A legal notice offering a 30-day comment period on the proposed action will be posted in the Juneau Empire, the newspaper of record, likely in February 2015. The new regulations at 36 CFR 218 now provide for a pre-decision administrative review rather than a post-decision appeal process. After the comment period on the EA, we will release a draft decision and will publish a legal notice initiating a 45-day objection period in the Juneau Empire. At that point, members of the public may file an objection seeking a pre-decisional administrative review of the proposed project and activities. If no objections are received, the Juneau District Ranger may sign the final decision notice five (5) business days after the close of the objection filing period and implementation may begin immediately. If an objection is filed, a review process begins. Based on the discussions and findings in that review, the Juneau District Ranger will issue a final decision. It is important to note that the project may be implemented after the final decision is made. No appeal period will be provided after the final decision is made.