United States Department of Agriculture

Lena Beach Recreation Area Renovation

Environmental Assessment

Forest Service
Alaska Region

Tongass National Forest
Juneau RangerDistrict

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Cover: Existing shelters, outhouses, and culvert and fish pass at Lena Beach

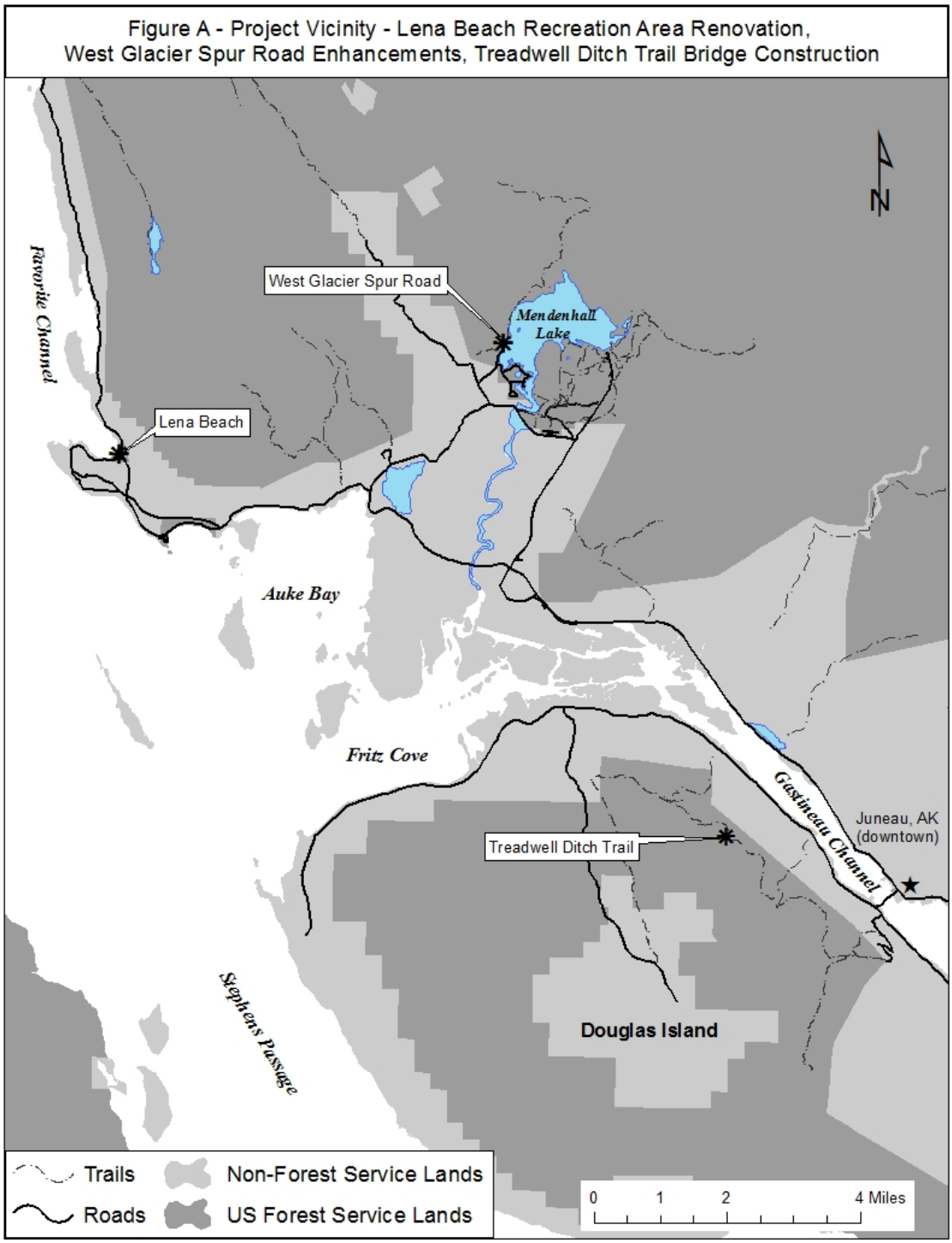
Summary Table

What action is proposed?	The Proposed Action is to: • Pave the road, adjust its alignment, and change it to a one-way road; remove the rocks and install parking stops, lines and speed bumps; • Designate a small loading/unloading zone • Install two gates • Reconstruct all shelters and make one shelter a large, more developed fee shelter available for reservations during the summer • Replace vault outhouses • Connect site features with fully accessible trails • Replace one or more fire rings with larger fire rings • Level picnic sites and improve accessibility • Install bear-resistant garbage cans and dog feces-removal bag dispensers • Install three to four bike racks • Improve fish passage • Fabricate and install signs • Close and convert one entrance off of Lena Loop Road to a summer volunteer host site.
Why?	The condition and design of the Lena Beach Recreation Area no longer provides a quality recreation experience, or resource protection. The current condition of developments at Lena Beach does not address safety concerns, environmental issues, deferred maintenance, and the functionality of the high use Lena Beach Recreation Area. In addition, the anadromous stream at the site runs through four undersize culverts and empties into a concrete “fish ladder”. The culverts and the ladder are a partial barrier for fish passage at a time when the Forest is making a forest-wide effort to replace fish-passage problems.
What other action would meet the same need?	Alternative 3, which contains many of the same actions as Alternative 2, but makes adjustments based on unresolved concerns from the public and the interdisciplinary team, also meets the need.
What would it mean not to meet the need?	Deferred maintenance, safety, and accessibility concerns at this site will remain. Picnic Creek would remain in its current configuration likely result in a continuation of few adult salmon utilizing this stream.
What factors will be used	This environmental assessment does not identify any significant

when making the decision between alternatives?	environmental consequences of the Proposed Action. However, adverse environmental consequences of the alternatives will be considered along with benefits of improved safety, recreation experience, function, and increased fish passage.
Are there any ways to mitigate adverse effects?	The primary method for reducing adverse effects is through application of Best Management Practices as well as the implementation of Design Elements. Additional mitigation includes: • Removing a weed infestation prior to road construction, • Blocking, and trapping and relocating fish in some areas to minimize direct impacts to resident and rearing fish. • Using temporary planks during construction where feasible to minimize damage to the stream channel and stream banks. • Installing a temporary diversion during the fish ladder removal and construction of the new stream channel below the crossing. • Revegetating bare soil resulting from project activity if prompt natural regeneration is not expected.
What monitoring is required?	Monitoring of the weed mitigation measure implementation and effectiveness will occur within 3 years of project completion. Additionally, when possible, the areas where gravel or other materials have been imported will be inspected by a botanist or other staff trained in plant identification for 2-3 years afterwards to ensure no invasive plants are present.

Location and Background

Lena Beach Recreation Area is located at about mile 17 along Glacier Highway, northwest of Juneau, Alaska. It is approximately 30 acres, and was set aside in 1952 as a public campground. Although designed as a campground, it has only been developed and used as a day use facility.



There are three entrances to the recreation site; one from the highway and two from Lena Loop

Road (see Figure B at the end of this EA). The site includes an anadromous fish stream. The site receives use by Juneau residents every day of the year. Many forms of recreation, including picnicking, walking, fishing, kayaking, and other uses are encouraged.

The proposed activities are located in the Semi-remote Recreation Land Use Designation.

Purpose and Need for the Proposal

The purpose of this proposal is to address safety concerns, environmental issues, deferred maintenance, and the functionality of the high use Lena Beach Recreation Area. The Tongass Forest Plan (2008) directs the Forest Service to maintain high use recreation sites for the health and safety of all users; to maintain riparian areas with natural stream banks and stream channel processes; to provide barrier-free, accessible facilities appropriate to the site development level and area Recreation Opportunity Spectrum (ROS) setting; and to maintain roads, as necessary, to provide passage of planned traffic. This project is needed because the condition and design of the Lena Beach Recreation Area no longer provides a quality recreation experience, or resource protection, for the following reasons:

1) The road through the site (National Forest System Road - NFSR 8451) is prone to potholes. The traveled way regularly widens as people stray off the gravel surface to avoid potholes. Sediment from the gravel road is transported into the stream off the roadway.
2) Parking is limited at this site and is currently not efficiently designed to maximize space.
3) Vandalism occurs regularly at this site including illegal dumping and damage to recreation facilities. Litter and pallets are regularly left there. There is not a consistent Forest Service presence to provide information or education to visitors or to clean up the litter.
4) Access trails to current outhouses and shelters, outhouse buildings, and picnic tables do not meet trail accessibility standards.
5) The five picnic shelters at the Lena Beach site have posts that are rotted and/or have been damaged by vandalism and environmental conditions. Some shelter sites are not up to current accessibility standards.
6) One picnic shelter is rarely used, presumably because it lacks nearby parking, and is not easily visible or accessible.
7) Some uses, such as kayak launching or bicycling are not well accommodated at the site. There is no longer a good spot to load and unload kayaks from vehicles at Lena Beach and parking for bicycles is not currently provided at this recreation site.
8) Picnic shelter sites, including reservable sites, are very popular. There is demand for larger, more developed shelters that can be reserved during the summer time in Juneau.
9) Two of six outhouse vaults are closed due to leaking tanks, potentially affecting water quality, human health and safety, and anadromous fish habitat.
10) The anadromous stream at the site runs through four undersize culverts and empties into a concrete “fish ladder”. The culverts and the ladder are a partial barrier for fish passage at a time when the Forest is making a forest-wide effort to replace fish-passage problems. The existing interpretive sign describes the conditions related to the existing fish ladder.
11) Old growth tree roots are being damaged by foot and vehicular traffic, and some of the shelter and picnic pads are eroding.

12) 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 concerns about the Proposed Action that could not be resolved are described below and provide the basis for the design of Alternative 3 in this EA.

- Existing shelters locations were not chosen with accessibility in mind. Recent field surveys of the current shelter locations have identified conditions that would make it difficult to provide full accessibility without substantial change to the site (in terms of removing trees or removing or building berms).
- Due to sharp turns and a lack of space, there is a safety concern related to parking at the entrance to the recreation area.
- Gates can be expensive and unattractive additions at recreation sites, especially in a place where gates are not expected to be used regularly which is the case at Lena Beach.
- Proposed outhouse locations are concentrated in two areas, and one lies within wetlands that would require a fill permit. Additionally, the proposed four stalls provide more than the capacity that is needed at Lena Beach.
- Changes in road alignment and shelter location can affect resources such as heritage and others. The choice of fish passage structure may require road realignment and shelter relocation.

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 Lena Beach 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. Figure B at the end of this EA shows many of the existing site features.

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, now also known as Alternative 2, 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, and to further explain or clarify the proposal. These changes are important to understanding and explaining the project.

Alternative 2 is designed to meet the purpose and need for the Lena Beach project and the project-specific desired conditions shown in the Purpose and Need section of this EA. Alternative 2 includes all Best Management Practices, Design Elements, Mitigation Measures, and Monitoring described below. A map of Alternative 2 (Figure B) is at the end of this EA.

In this refined Proposed Action, several additions were made to fulfill interests identified by the public: bike racks were added, a kayak loading/unloading spot will be identified, and dog feces-removal bag dispensers will be included in the design. If needed, the road will be realigned slightly at the turn by the road entrance to provide access for busses and emergency vehicles. We clarified Alternative 2 to reflect that the existing large rocks along the parking area and a rarely-used picnic table will be removed, that we intend to replace the fisheries interpretive sign, and to explain what utilities will be provided at the host site. We also further described what will happen to existing outhouses/vaults and picnic sites, and adjusted and further described the timing and duration of the activities.

To address the concerns described in the Purpose and Need and to improve the site in the Lena Beach area the Juneau Ranger District proposes in Alternative 2 to:

- Change the road through the Lena Beach Recreation Area to a one-way road in a clockwise direction with one entrance and one exit; pave the road (to a width of about 16 feet to allow vehicles to safely pass pedestrians or bicyclists using the road) and parking areas; remove the rocks and install parking stops and speed bumps; paint diagonal parking lines; and add additional parking; adjust the alignment of the road at the turns, if needed, to allow for bus and emergency vehicle access;
- Designate a parking site (the site with the natural hump/ramp) as a loading/unloading zone for kayaks, other small boats, and other uses. Use signage to encourage only short-term use;

- Install two gates, one at the entrance and one at the exit to the area; gates will be used to close the road for safety and administrative needs;
- Reconstruct all shelters, in place, but turned 90 degrees to maximize views and direct water away from the view. This would include adding concrete pads to all sites to improve accessibility and making one shelter a large, more developed fee shelter available for reservations during the summer;
- Replace six one-stall vault outhouses in three locations with two two-stall, fully accessible vault outhouses in two locations, and move them closer to the road to improve maintenance and accessibility. Remove old outhouses, pump out and fill old vaults, and re-vegetate outhouse sites;
- Connect site features with fully accessible trails, where practicable, to meet standards and to protect tree root systems. The stairs at the shelter closest to Glacier Highway may be replaced by an accessible trail ramp or the stairs may be adjusted to improve accessibility;
- Replace one or more fire rings with larger fire rings;
- Level picnic sites and improve accessibility by adding minimal gravel and retaining stones; remove one picnic table on the highway-side of the road;
- Install bear-resistant garbage cans close to shelters and provide garbage removal service; two dog feces-removal bag dispensers will be included in the design for this site – but their installation and re-stocking will be based on availability of funding;
- Install three to four individual bike rack units parallel with or at an angle to the road set back far enough that parked bikes don't stick out into the driving lane. Bike rack capacity would total six to eight bikes;
- Improve fish passage by: installing a bridge or properly-sized culvert over the existing Picnic Creek channel, removing the fish ladder on Picnic Creek below the lower culvert, restoring the channel bed to a depth of the average channel slope line, removing some of the backed up sediment upstream of the culvert while allowing the remaining material to wash out naturally, and modifying the alignment of the channel downstream of the lower culvert. In this alternative, the road and crossing would remain in their current location with very little adjustment to the road width, location, or alignment;
- Fabricate and install directional and informational signs, including signs to indicate shelter names. Replace the fisheries-related interpretive sign; and
- Close and convert one entrance off of Lena Loop Road to provide a parking pad for a host site; and install electricity at the host site. Install and provide water near the host site as the project and annual budgets allow.

Staffing the site with a summer-time volunteer host to provide maintenance, trash pick-up, visitor information, and a presence to deter vandalism is an action connected to this project. 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—The timing and duration of activities is dependent on funding. Ideally, implementation would begin in 2015 and last up to 2 years. If additional funding does not become available soon, implementation may occur in phases over the next several years with road paving and other road-related activities occurring first. In all cases, all or part of the site will be closed to public use during the construction as long as necessary to safeguard the public, personnel, and the contractor's equipment.

Alternative 3

The IDT visited the site several times and reviewed scoping responses. Several concerns with the Proposed Action were identified as described in the Issues section above. Alternative 3 is very similar to Alternative 2, but was designed to resolve the identified concerns while meeting the purpose and need for the Lena Beach project. Alternative 3 includes all Best Management Practices, Design Elements, Mitigation Measures, and Monitoring described below. A map of Alternative 3 (Figure C) is at the end of this EA.

In Alternative 3, the Juneau Ranger District proposes to:

- Similar to the Proposed Action, in this alternative we would change the road through the Lena Beach Recreation Area to a one-way road in a clockwise direction with one entrance and one exit; pave the road (to a width of about 16 feet to allow vehicles to safely pass pedestrians or bicyclists using the road) and parking areas; remove the rocks and install parking stops and speed bumps; paint diagonal parking lines; and adjust the alignment of the road at the turns and potentially at Picnic Creek to allow for bus and emergency vehicle access;
- In this alternative we would add only limited parking near the entrance to the area due to safety concerns and lack of space and add additional parking between Shelters 4 and 5 (see Figure C); at all parking lots, we would add a gravel path along the "head" of the parking lot to funnel people away from the parking lot; we would also shift the entry drive to create more of a "T" intersection than currently exists;
- Similar to the Proposed Action, this alternative would designate a parking site (the site with the natural hump/ramp) as a loading/unloading zone for kayaks, other small boats, and other uses and use signage to encourage only short-term use;
- Instead of a gate, install bollards (two posts, one on each side of the road that are designed to hold a removable/portable gate that can be attached between the posts) at the road entrance and exit; the portable gates will be used to close the road for safety and administrative needs;
- All shelters will be reconstructed on concrete pads and turned 90 degrees to maximize views, however, the shelter locations and trails accessing them would be adjusted slightly in this alternative. Shelter 3 may be moved several feet to accommodate the fish passage adjustments at Picnic Creek and improve accessibility. Shelter 4 would be reconstructed about 60 feet northeast of its current location and made into a larger, more developed fee shelter available for reservations during the summer; Shelter 5 would be reconstructed and moved forward towards the water several feet; the fire ring at this site would also be moved and seating rocks added at the fire ring. Concrete pads would be added to all sites to improve accessibility;
- Replace six one-stall vault outhouses in three locations with three one-stall, fully accessible vault outhouses in three locations (see Figure C); move them out of their proposed location in wetlands and closer to the road to improve maintenance and accessibility. Remove old outhouses, pump out and fill old vaults, and re-vegetate outhouse sites;
- Connect site features with fully accessible trails, where practicable, to meet standards and to protect tree root systems. An accessible ramp/access trail would be built from the new

parking lot near Shelter 5 to the existing trail to Shelter 5 and the stairs at Shelter 5 may be adjusted by installing better handrails and improved landing;
- Replace one or more fire rings with larger fire rings;
- Level picnic sites and improve accessibility by adding minimal gravel and retaining stones; remove one picnic table on the highway-side of the road; the picnic table closest to Shelter 4 would be moved slightly to avoid the kayak launching area;
- Install bear-resistant garbage cans close to shelters and provide garbage removal service; two dog feces-removal bag dispensers will be included in the design for this site – but their installation and re-stocking will be based on availability of funding.
- Install three to four individual bike rack units parallel with or at an angle to the road set back far enough that parked bikes don't stick out into the driving lane. Bike rack capacity would total six to eight bikes;
- Improve fish passage by: installing a bridge or properly-sized culvert over the existing Picnic Creek channel, removing the fish ladder on Picnic Creek below the lower culvert, restoring the channel bed to a depth of the average channel slope line, removing some of the backed up sediment upstream of the culvert while allowing the remaining material to wash out naturally, and modifying the alignment of the channel downstream of the lower culvert. Survey and design will determine final alignment of the road and type of crossing. Location of the road and shelter 3 may change because of the adjustment to fish passage;
- Fabricate and install directional and informational signs, including signs to indicate shelter names. Replace the fisheries-related interpretive sign; and
- Close and convert one entrance off of Lena Loop Road to provide a parking pad for a host site; and install electricity at the host site. Install and provide water near the host site as the project and annual budgets allow.

Staffing the site with a summer-time volunteer host to provide maintenance, trash pick-up, visitor information, and a presence to deter vandalism is an action connected to this project. 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—Timing and duration would be the same as described in Alternative 2.

Best Management Practices, Design Elements, Mitigation Measures 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. 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 and delivered 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 material away from site as designated by the Forest Service Administrator.

14.14 Control of In-Channel Operations - Remove any construction-caused debris from the stream immediately in a manner that will cause the least disturbance to the streamcourse.

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:

1. Turnpiking
2. Surface or subsurface puncheon
3. Overlay on filter fabric
4. Boardwalks
5. Water bars
6. Railings
7. 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 and Alternative 3.

1) 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.
2) Project design would strive to borrow from colors and textures found in the natural landscape (USDA 2008, p. 4-58), meaning that subdued shades of greens, browns, and grays, and flat, non-reflective textures would be used. Proposed structures would present an architectural style compatible with the character and climate of the Pacific Northwest.
3) 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.

4) Instream work in Picnic Creek would be best from June 1 through the end of July. Work outside these dates could negatively impact smolt outmigration (spring), and the return of adult salmon (pink salmon in August followed by coho in September/October).
5) Conduct removal of backed up sediments upstream of the lower culvert during low tide. This will allow beach gravels to filter and settle sediments prior to reaching salt water, minimizing disturbance to marine fish.
6) Use coconut fiber (coir) matting for erosion control as an alternative to straw bales when available and practical.
7) Avoid spreading invasive plants by ensuring road and trail materials are free of invasive plant seeds and/or parts.
8) Prevent invasive plant establishment during construction by washing tools and equipment prior to first entering an un-infested area, or when re-entering an un-infested area from an area infested by invasive plants.
9) Areas suitable for staging construction materials and equipment will be identified on-site.
10) 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.
11) If any previously undiscovered endangered, threatened, proposed, or sensitive species or key habitats for any Management Indicator Species 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.
12) The district will create a sign plan, for directional, shelter identification, information, and one interpretive sign, to assure signs and their locations meet Department of Transportation and Forest Service specifications.
13) All-terrain vehicle use is not allowed in the area; their access at the kayak/dog ramp site will be blocked by a few large rocks placed on the beach side

Mitigation Measure

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

1) Prior to commencing road construction activities, the “bishop’s weed” infestation should be treated by digging out the entire infestation to a depth of at least 30 cm. This may be accomplished using powered equipment such as a backhoe. All plant material and soil must be bagged and properly disposed in a designated landfill. Replacement fill material must be free of invasive plant seeds or parts (see mitigation item 6). The treatment must be conducted under the supervision of a Forest Service botany specialist or designated representative.
2) Work with district fisheries personnel to install block nets and trap and relocate fish near the creek/road crossing during instream construction. This will minimize direct impacts to resident and rearing fish from mechanized damage and excess siltation during ground disturbing activities.
3) Minimize stream crossings with motorized equipment. Use temporary planks during construction where feasible to minimize damage to the stream channel and stream banks.

4) Install a temporary diversion during the fish ladder removal and construction of the new stream channel below the crossing.
5) Re-vegetate 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) The project manager will ensure that botany mitigation measures are implemented. A Forest Service botany specialist or designated representative will monitor implementation and effectiveness of these measures within 3 years of project completion.
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 Forest Service would obtain concurrence from Alaska Department of Fish and Game for in-water work in fish bearing streams, including bridge replacement and culvert removal. In Alternative 2, a Nationwide Permit will be required from the U.S. Army Corps of Engineers for the fill needed at one of the outhouse structures if, to best meet accessibility standards, the location cannot be adjusted to avoid the wetlands. No permit would be needed for Alternative 3 since wetlands would be avoided.

Environmental Impacts of Alternatives 1, 2, and 3

The direct, indirect and cumulative environmental impacts of Alternatives 1, 2, and 3 (No Action and Proposed Action, and a third alternative) are described below with resources listed in alphabetical order. The discussion focuses on resources most likely to be affected by the alternatives. 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 consist of species that are not high priority for control in this area. Weeds located in this area include reed canarygrass (*Phalaris arundinacea)* and oxeye daisy (*Leucanthemum vulgare*) which are classified by the Tongass National Forest as high priority for control, but not in areas of development such as this. Other low priority weeds are present in the area including an infestation (about 25 ft^2) of bishop's weed (*Aegopodium podagraria*) adjacent to the road near an existing kiosk sign. In the No Action Alternative there is a low risk of establishing and spreading highly invasive plants because current infestations would not likely spread into undisturbed areas and existing species are not high priority for treatment on the Tongass National Forest in this type of area (FSM 2080 TNF Supplement, Exhibit 3).

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. Bishop's weed is not designated a high-priority species for control, but ground-disturbance near the infestation could facilitate the spread of this shade-tolerant species into nearby forest. Reconstruction of the existing road, parking areas, and shelters, removal of the fish ladder, and stream channel restoration could remove some existing understory vegetation and/or expose mineral soil. The construction equipment and tools could serve as vectors for spread of existing invasive plant infestations. Increased recreational use following completion of the improvements could also increase the risk of spread and introduction of invasive plants. 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). Implementation of all 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 described in Alternative 2.

Cumulative Effects – Since there are no direct or indirect effects expected on sensitive or rare plants, there are no cumulative effects on these plants. In terms of invasive plants, 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 or 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 Lena Beach Recreation Area, moderate effects to fisheries or aquatic resources are expected. Prior to the construction of a culvert crossing the road in the late 1960s, Picnic Creek contained populations of pink, chum, and coho salmon as well as Dolly Varden char and cutthroat trout. Scouring below that culvert made it impassable to upstream fish movement. The current fish-pass ladder was installed in 1992 with more work done through from 1993-2011, all with varying success at restoring the anadromous fish runs to the creek. While this system is not extensive, recent trapping has confirmed coho and pink salmon continue to use the stream. The creek is 2.4 miles long, with 1.15 miles of spawning habitat, and a total of 1.5 acres of coho salmon rearing habitat.

The culvert that would remain at Picnic Creek is undersized and has negatively affected stream conditions by over-widening the banks upstream and limiting the natural movement of sediments. Over-widening causes erosion and slows the flow of water. These impacts degrade the quality of spawning and rearing habitat available for fish. Existing conditions for fish and aquatic resources in the area would continue to be negatively impacted by the current undersized culverts and fish-pass ladder. Therefore, no action on this proposal would result in moderate effect to the resource.

Alternative 2, Proposed Action – In the short-term, the Proposed Action would result in minor[1] 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, or 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. In the long-term, improvements to the existing culvert and removal of the fish-pass ladder would have beneficial effects on the fisheries habitat in the project area.

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. 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 by this project. With implementation of the design features and BMPs described above, minor impacts to aquatic resources, including anadromous fish, are anticipated to complete this activity.

Many of the changes and renovation proposals for the area would have no impact on fisheries or aquatic resources as they involve minimal or no ground disturbance to accomplish (replacement of fire rings, installation of garbage cans, signs, gates, and bike racks for example). Road reconstruction and outhouse replacement are both expected to have negligible effects on aquatic resources. Fish passage restoration would have minor adverse effects in the short term but beneficial effects upon completion. This work would improve fish passage to 1.15 miles of spawning habitat, and a total of 1.5 acres of coho salmon rearing habitat.

[1] 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.

Under both Alternatives 2 and 3, the length and width of the proposed road is essentially unchanged from the existing condition and the major change will be the addition of pavement and paved parking spots. Hardening the driving surface with pavement will help decrease the amount of sediment input into nearby Picnic Creek. The addition of paved parking spots and curbs will also decrease erosion potential by limiting vehicle use within the vegetated buffer along the road. Negligible impacts to aquatic resources are anticipated to complete this activity.

The overall footprint of the outhouses will decrease from six units in three locations down to four units in two locations with the proposed action. Furthermore, the new units will utilize vaults to contain waste material. The vaults will be serviced at regular intervals and no leach field is needed for this improvement. Effects could occur with the potential alteration of surface water movement from added fill in the wetland area, but would not be considered significant (see Soil and Wetlands). Due to the suitable distance from Picnic Creek and the salt water for all locations (over 100 feet), negligible impacts to aquatic resources are anticipated to complete this activity.

Improvements to the existing culvert and fish-pass ladder (or ladder removal) would have short-term adverse effects and long-term beneficial effects on the fisheries habitat in the project area. Replacement of the culvert with a bottomless arch, squash pipe, or bridge will alleviate the problems caused by the undersized culvert and improve fish passage for all fish life stages and would add (at a minimum) 30 foot of spawning habitat for salmonids. Replacing the culvert will require excavation of the existing culvert and adjacent roadbed material and create a disturbance to the stream with sediment inputs. This necessary disturbance would be temporary in nature and cause negligible impacts to aquatic resources.

The existing fish-pass ladder connects the system to salt water, but offers no spawning habitat and has limited access during periods of high flow. Replacement of the crossing structure will also require removal of the ladder. It is sized to accommodate the existing culvert and would no longer be effective with an improved crossing structure. To improve stream function and fish access, a new stream channel will be designed and installed below the road crossing in place of the ladder. The creation of new stream channel to replace the removed ladder could add spawning habitat to the stream for pink salmon. The exact length of reconfigured channel below the road crossing will be determined upon final survey and design.

Construction of a new channel and crossing structure would require the temporary diversion of Picnic Creek and allow work to occur in dry conditions. Once the redesign is complete, the diversion can be removed, allowing Picnic Creek to flow freely. The temporary diversion would prevent fish movement in and out of the stream while in place. Utilization of a diversion would generate minimal sediment disturbance during culvert/ladder removal and stream course construction. A temporary stream diversion will create short-term impacts to fish by blocking passage. If work is conducted during the recommended fish window (June 1 through the end of July), impacts will be minimal. As a result, minor impacts to aquatic resources are anticipated to complete this activity.

Removal of deposited sediment upstream of the lower culvert will improve the quality of approximately 150 feet of spawning habitat. This work could create a significant disturbance to fish for a short period. However, there is minimal freshwater fisheries habitat found between this site and salt water. Regardless, block nets installed upstream prior to disturbance will prevent movement of fish into the work area. Fish found in the work area will be trapped and relocated

upstream. Fish using the near shore marine environment may be affected from the temporary increase in suspended sediments generated from the disturbance. Due to the short-term disturbance of this activity, negligible impacts to aquatic resources are anticipated.

Management prescriptions would emphasize wetland protection and control of potential erosion sources (BMPs 12.6, 12.8/9, 13.16, 14.6, 14.12, 14.14, 14.17).

An improved crossing structure would be critical in avoiding major impacts to fisheries and watershed resources. This would require any support structure (bridge abutments or culvert sidewalls) to be installed well outside the stream bank-full channel to avoid restricting natural movement of the stream over time or during periods of high flow.

Proper use of silt fencing around the crossing site during road paving preparation and avoiding instream/bank disturbance work during periods of high stream flow will be necessary to minimize sediment impacts to aquatic resources.

With implementation of the design features and BMPs described above, minor impacts to aquatic resources are anticipated to complete this activity.

Alternative 3 – The effects of Alternative 3 are nearly identical to Alternative 2. The effects related to most actions including road replacement and fish passage restoration are the same as Alternative 2. Because Alternative 3 proposes to move Shelter 5 closer to the saltwater, Alternative 3 could generate short-term increases in sediment levels during the construction phase; however, the shelter would remain above mean high tide in the "beach fringe." Thus there will be no significant adverse effects and the fishery will not be impacted such that sustainability or ecosystem health would be impaired. Additionally, under Alternative 3 the outhouse footprint will decrease to three units in three locations. None of the three locations would be in wetland areas, reducing potential effects to wetlands. All other considerations already described above would remain the same. Negligible impacts to aquatic resources are anticipated to complete this activity.

Similar to Alternative 2, in the short-term, Alternative 3 would result in minor adverse effects to water resources, the effects are minimized through the implementation of design features, and in the long-term, improvements would have beneficial effects on the fisheries habitat in the project area.

Cumulative Effects **-** There exists the potential for increased stream bank and wetlands habitat disturbance over time if infrastructure improvements encourage increased use of the natural areas by the public. Increased human traffic does not guarantee increased resource damage. However, active management techniques, such as designing trails to protect tree root systems, may be necessary to regulate and minimize human disturbances within the Class I stream course and adjacent wetlands areas.

With continued glacial rebound, a restored stream channel which eliminates a fish ladder will likely support effective fish passage longer into the future.

The proposed improvements could possibly encourage use of Picnic Creek by stray Chinook salmon for spawning and rearing. Th Alaska Department of Fish and Game (ADF&G) plans to install net pens in Lena Cove for rearing Chinook fry starting in 2015 to enhance salt water sport fishing opportunities. Picnic Creek drains into Lena Cove. It is unknown whether these hatchery-based fish would enter the stream and/or disturb spawning redds developed by native salmonids. Chinook salmon are known to select much larger systems than Picnic Creek for spawning,

making this scenario unlikely. ADF&G biologists have been consulted regarding this issue and stated they would re-evaluate the decision to locate Chinook net pens in Lena Cove if their presence in the system degrades the native fishery.

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. Alternative 3 proposes to move Shelter 5 closer to the saltwater, but would still remain within the beach fringe and above mean high tide. The proposed action and Alternative 3 could generate short-term increases in sediment levels during the construction phase. However, in the opinion of the Forest Service, there will be no significant 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 – Lena Beach Recreation Area was determined eligible for inclusion on the National Register of Historic Places. It is a historic recreation facility because of its association with the broad patterns of history (the growth of recreational facilities in the Alaska Region during the period, from 1945 to 1959, following the Great Depression and World War II (Lantz, 2009)). No other historic properties have been found in the area. Under the No Action alternative, there would be no direct effects to historic properties. The No Action Alternative would result in a determination of "no effect" to historic properties although the aging shelters and recreation area would continue to suffer from the effects of vandalism and benign neglect. Currently incidents of vandalism occur somewhat regularly and this would likely continue.

Alternative 2, Proposed Action and Alternative 3 – The archeological review has resulted in a determination of "no adverse effect" for both action alternatives, the Proposed Action and Alternative 3. While the recreational area will be updated and made more current and will be affected by the proposed changes the changes will not be adverse. The recreation area will continue to have the same layout and design as before this renovation, and its setting, location, and design will not be adversely affected. The feeling and association would not be changed. The design of the shelters will be somewhat effected by the proposed renovations, as will the workmanship of the shelters, but again the changes will not be adverse. The recreation area would retain integrity of location, setting, feeling, association, and materials.

Cumulative Effects – Since there would be no adverse effects from Alternatives 2 or 3 of the Lena Beach project, there would be no cumulative effects on historic properties.

Recreation and Scenery

Alternative 1, No Action – Under the No Action Alternative the Lena Beach area would remain in its current condition. Safety concerns, environmental issues, deferred maintenance, and the

functionality of the high use Lena Beach Recreation Area would not be addressed. The road would remain gravel and require regular grading to reduce potholes. Parking would continue to be limited due to poor design. Existing picnic shelters with their rotted or vandalized posts would remain in place and no larger, more developed shelter would be constructed. The demand for larger, more developed shelters that can be reserved in Juneau during the summer time would be more likely to be unmet. All six outhouses would remain in place with two of six outhouses closed to users due to leaking tanks. Leaving these outhouses with their leaking tanks may be affecting human health and safety. Facilities including trails, outhouses and shelters would remain inaccessible to some users. The rock barriers along the road would remain in place and continue to look out of place, and in some instances block users from enjoying the site fully. Bike parking would remain unavailable. Capacity of the site would remain as is (see Table 1).

Erosion would continue along unhardened trails and trees may be damaged and need to be removed due to damage from foot and vehicular traffic. Vandalism and dumping of litter, and the costs they incur, would likely continue. The current level of site development and the choice of materials used meet Forest Plan standards for the adopted Scenic Integrity Objective (SIO) of moderate (meaning "slightly altered"). This SIO level would continue under the Alternative 1.

The culvert and fish ladder would continue to be a partial barrier for fish passage, thus limiting spawning and rearing habitat and opportunities for recreational fishing. Dedicated funding would not be used and would not be available to other projects.

Alternative 2, Proposed Action – Safety concerns, environmental issues, deferred maintenance, and the functionality of the high use Lena Beach Recreation Area would be addressed by the Proposed Actions.

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

In the short-term, some vegetation and trees would be removed to allow some activities to occur and or to improve views and experience at the site. In Alternative 2, more trees and berms would have to be removed than in Alternative 3 to provide accessibility. Where possible, the project was designed to limit the number of large trees removed or damaged by project activities to retain the character and experience at Lena Beach.

In the long-term, under the Proposed Action the Lena Beach 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.

The road and parking would be improved and made safer through designation of parking spots, installation of speeds bumps to slow traffic, and the change to a one-way road. As stated in the Proposed action, we intend to adjust the alignment of the road to assure that busses, as well as RVs and fire trucks, can make the turns. Diagonal parking and better defined parking stalls increases the available parking in the area (see Table 1).

Recreation opportunities are expected to improve under Alternative 2. With removal of the rock barriers and improvement of parking, the area would be more usable, especially for those loading and unloading kayaks and small boats. Bike parking would be made available encouraging people to bike to this area. The fish passage barrier would be removed, thus providing more opportunities for recreational fishing with higher saltwater returns.

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 without having to staff or patrol the closure.

Facilities including trails, outhouses, and shelters would be accessible to nearly all users. A recreationist would be able to access most facilities and sites above the beach via wheelchair. At the same time, tree roots and therefore the trees themselves, would be protected via trail improvements or reroutes. Pedestal grills and fire rings would be replaced with similar but new products, and placed within a living space designed to better accommodate a recreationist using a wheelchair.

Picnic shelters would be improved to be more visually appealing and accessible. Picnic shelters would be timber construction, and treated with a light-colored preservative to show off the natural wood color. With improvements in roofing they would be more durable and long-lasting. With the construction of a larger, more developed shelter, the demand for reservable shelters could be better met and funding gathered from reservations could help to better maintain this recreation site. Pedestal grills and fire rings would be replaced with similar but new products, and placed within a living space designed to better accommodate a recreationist using a wheelchair. One less picnic table would be available. However, this table was on the side of the road away from the beach and was almost never used.

Removing the old outhouses, cleaning and filling and re-vegetating the old vaults will help protect users and water quality. Replacing and moving outhouses will make them more accessible and make them easier to use and clean. Since some existing toilets were not open to the public because of resource concerns, the reduction in toilet numbers and location is a minor change from the existing condition (see Table 1).

Table 1: Site Capacity Summary

	Alternative 1, No Action	Alternative 2, Proposed Action	Alternative 3
Shelter sites	5	5	5
Picnic Tables	4	3	3
Parking Spots	25	35	33
Toilets (usable)	4	4	3
Site Capacity (Persons At One Time – PAOT)a	101	134	127

[a] Persons At One Time is a measure of the total site capacity and is a combination of capacity at shelter sites, picnic table sites, and parking stalls.

Work at the host site would provide a location for a host in a camper/trailer. If funding is available, potable water may also be available for Lena Beach users as well as the host. With the presence and work of a host and the other improvements made at the site, vandalism and

dumping of litter, and the costs they incur, are expected to decrease, and cleanliness, maintenance, and information sharing/education are expected to increase. The cost for hiring a host would be very limited since the host is a volunteer expected to only be present in the summer.

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.

In many cases facilities (like the toilets, reservable shelter, and trails) would be larger and more noticeable than at present, but also more accessible and in the case of the toilets, more easily monitored for vandalism, being placed in closer proximity to and at approximately the same grade as the road. Two separate bathrooms would be combined into one building, rather than the current situation. Construction materials for the toilets would likely be precast concrete, as it would weather the shaded, damp location better than wood. However, all construction colors and textures would be selected that imitate wood, rounded river rock material, and/or shingle roofing. Although more developed in appearance, the overall impression would be that of a well-designed, well-kept, and orderly facility.

The proposed action would require adopting a Low SIO for recreation development purposes. Under this SIO, the site would appear "moderately altered," a step up in SIO scale from "slightly altered." Various elements of the built environment would begin to dominate the valued landscape character, but the site design and materials used would borrow from valued color and texture found in the natural landscape. New structures would be compatible with, or complimentary to, both the landscape character and the architectural style of the region, using natural or natural-appearing materials, and a stout timber-framed shelter design in scale with the natural environment. This level of alteration would be compatible with a Rural ROS class, the site's current designation.

The Forest Plan explains (and allows) that facilities associated with a concentrated recreation development may not meet this adopted SIO (2008 FP, p3-67, SCENE1, A.2.). After analysis of the proposal and public involvement, the NEPA decision document for this project will determine the specific SIO appropriate for the development. The environmental analysis prescribes design guidelines necessary to meet this scenery objective (p3-67, SCENE1, A. 2.).

Alternative 3 – The effects of Alternative 3 are similar in many ways to Alternative 2. Safety concerns, environmental issues, deferred maintenance, and the functionality of the high use Lena Beach Recreation Area would be addressed by this alternative. The effects related to recreation user disturbance, most road work, removing rocks, improving fish passage, installing bike racks, and providing a host and host site are the same as Alternative 2.

As in Alternative 2, site improvements would incorporate standards for accessible design to the greatest extent practicable. Moving the locations of picnic sites and shelters, and installing new parking and trail access for shelter 5 would result in more accessible grades on the trails to these sites than in Alternative 2. Relocating the access trail to shelter 2 would improve access to that site over Alternative 2 as well. At the same time, moving these sites, trails, and shelters requires additional ground disturbance and removal of vegetation which increases the amount of site rehabilitation needed in this alternative. Since in this alternative large trees were largely avoided, natural tree sprouting and implementation of Best Management Practices and mitigation measures should return vegetation to the area quickly.

The three equally-spaced, single-room toilet facilities would provide less capacity, but be more equally distributed within the site and be smaller in size than the two-room facilities proposed in Alternative 2. Three toilets are expected to fulfill the needed capacity at the site. The toilets would still be quite visible, placed near the road and at approximately the same grade as the road, although less so than the larger buildings in Alternative 2. The smaller toilets could also avoid wetlands, thus avoiding the need for a wetlands permit. The effects of removing the old toilets are the same as Alternative 2.

Reducing the number of parking spaces and installing a smaller toilet building at the site entry would reduce the number of trees and square feet of ground space affected by development, and would improve safety. The capacity of Alternative 3 is slightly lower than Alternative 2, but still higher than Alternative 1 (see Table 1). Installing bollards and using portable gates would provide similar results as the gate in Alternative 2, but would be significantly less noticeable for recreationists and likely less expensive to maintain.

Although slightly more developed in appearance than Alternative 2, the overall impression of Alternative 3 would again be that of a well-designed, well-kept, and orderly facility. Site development would appear more similar to a wooded rural park mainly due to the asphalt driving surface with striping, but the intent is that facilities viewed from the beach will appear natural, well designed, and well maintained. Similar to Alternative 2, Alternative 3 would require adopting a Low SIO for recreation development purposes; the site would appear "moderately altered," a step up in SIO scale from "slightly altered."

Cumulative Effects – Glacial rebound is occurring; its effects to recreation and use of this site are expected to be limited. Fishing for king salmon off the shore at Lena Beach will likely increase as ADF&G plans to install net pens in Lena Cove for rearing Chinook fry, so they will return to the area. ADF&G biologists have been consulted and would re-evaluate the decision to locate Chinook net pens in Lena Cove if they become established in the Picnic Creek system at the detriment of the native fishery. Increased fishing due to availability of king salmon could lead to fish waste that would be attractive to bears, but having a "campground host" on site that could remind fishers of proper fish carcass disposal should mitigate that potential.

It is also recognized that Alternatives 2 and 3 may increase the potential for bear/human interaction if Picnic Creek enhancements substantially increase the number of fish returning to the stream significantly. Given the stream's small size, a large increase in salmon returns is not anticipated, even with improvements. The intent is to make passage easier, and restore the run to former numbers that likely were never very large. With continued consultation and coordination with ADF&G, and monitoring, we expect the effects on recreation, humans, and bears to be minor and mostly beneficial.

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 Lena Beach area is and would continue to be well-used. People use the picnic areas and the primitive trails connecting the road to the outhouses. Since some of the outhouses are a fair distance from some of the shelters, users have been using adjacent brush areas for relief. Some of the vegetation is trampled from user-created trails. This trampling does not affect long-term soil productivity or wetland function.

Alternative 2, Proposed Action – Most of the proposed activities are located in uplands. One of the toilets is proposed where there is a 200-foot by 10-foot swath of forested wetland. There is a small island in the forested wetland that is upland (it is the area without any skunk cabbage in the understory). It may be difficult to avoid this wetland entirely with the location of the proposed vault toilet. The Proposed Action will affect soils and may fill 400 square feet (0.009 acres) of wetland. A Corps of Engineers permit will be needed for the proposed activities for filling in wetlands to install the eastern-most outhouse structures if, to best meet accessibility standards, the location cannot be adjusted to avoid the 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 road and parking lots, are irreversible or irretrievable uses of the land.

Alternative 3 – In Alternative 3, the effects to soils are the same as Alternative 2. However, unlike Alternative 2, in Alternative 3 all of the proposed activities are located in uplands. Alternative 3 changed the size and location of the vault toilets to avoid the small wetlands in the project area.

No Corps of Engineers permit would be required to place the outhouses in Alternative 3.

Cumulative Effects – The past, present, and future 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 or wetland function. Cumulative effects will be limited.

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. No changes would occur to the marine environment. No direct, indirect, or cumulative effects to marine species (humpback whales or Stellar sea lion) would occur from this alternative. 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 project area. Continued recreational use is expected to have no impact on sensitive species because of the lack of habitat and lack of or limited use by these species. Several Management Indicator Species (MIS) of wildlife and migratory birds use the area for habitat. Under the no action alternative, no habitat would be altered. Existing human uses of the area would continue. This could result in temporary disturbance and/or displacement of individuals, although they may be habituated to human presence and activities in the project area. Disturbance would be localized. The effects of the No Action Alternative would be negligible. The No Action alternative would have no impacts on any species viability.

Alternative 2, Proposed Action – As in the No Action alternative, Alternative 2 would have no impacts to Aleutian terns, dusky Canada geese, Kittlitz's murrelet, pinto abalone, Pacific walrus, and Iliamna harbor seals because there is no suitable habitat for these species and they are not expected to occur in the project (action) area or do not occur in Southeast Alaska.

While the area receives a limited amount of use by foraging black oystercatcher and Queen Charlotte goshawk, sightings are very rare, the habitat is of low value, and existing human activity and disturbance further reduce habitat quality. Alternative 2 will have no impacts to black oystercatcher and Queen Charlotte goshawk because there are no changes to high value habitat and negligible likelihood of disturbance to these species by the actions in Alternative 2. Alternative 2 will also have no impacts to the Steller sea lion – eastern DPS because no effects to the marine environment are expected.

Most threatened and endangered species of wildlife would not be affected because they lack habitat in the area and are not present in the area. For western DPS Stellar sea lions the proposed action is not expected to alter the marine environment or critical habitat, though it may immeasurably increase their prey base. No impacts to Steller sea lion are expected from this alternative.

Under the proposed action, no to negligible suitable habitat for MIS of wildlife 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 similar to the existing condition (No Action alternative). Under this alternative, the affected area is of sufficiently limited extent that the overall impacts to MIS are considered negligible.

Enhancing salmon spawning habitat in Picnic Creek could increase use by foraging bears. This could lead to increased potential for bear-human interactions. However, the change from current conditions is expected to be small enough that it will not substantially increase the area's attractiveness to bears (see Recreation Cumulative Effects in this EA). A host at the site reminding fishers of proper fish carcass disposal should h

Under the Proposed Action a small amount of potentially suitable migratory bird species habitat would be impacted. Some small trees (<12" dbh) and shrubs are likely to be removed during construction, 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 but by September, young birds have fledged and they would not be directly affected by construction activities. After construction, human uses would be similar to the no action alternative. Alternative 2 would have minor effects on migratory birds and bird species of concern. No impacts to any species' viability are expected.

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 action 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 all alternatives shall not result in a significant possibility of a significant restriction of subsistence uses.

Alternative 3 – Due to changes in the locations of some of the shelters, this alternative would have a slightly greater effect on vegetation and habitat than Alternative 2. However, the differences between Alternatives 2 and 3 are so minimal that there are no substantial differences between these alternatives with respect to effects on TES or MIS wildlife species, and migratory birds or subsistence. Negligible or minor direct, indirect, or cumulative effects are expected in Alternative 3.

Cumulative Effects – The no action alternative would have no new impacts and thus, no cumulative effects. Cumulatively, the action alternatives would add slightly to the overall developed footprint and level of human disturbance (during construction) in the area. Alternatives 2 and 3 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. The Douglas Indian Association, the federal recognized tribe for the Juneau area, was also offered ongoing, informal opportunities to discuss and consult on this project during tribal updates on July 25, 2014, March 31, 2014, and February 11, 2014. No formal consultation has been requested and no tribal comments have been provided to this point.

A public service announcement regarding the project was published in the Juneau Empire soliciting input on the proposed project at Lena Beach Recreation Area.

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.

Fourteen 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, a request related to designing the road to allow for access by busses and other large vehicles, was 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: using the gates for daily or winter closure, installing lighting, commercial use of the site, and closing outhouses in the winter. In these cases, because we don't currently need nor intend to do these actions, these items were not discussed as being part of the Proposed Action.

Some comments and suggestions were outside the scope of this analysis due to their location or for other reasons

Some comments suggested using security cameras instead of gates and/or a host to provide security. The Forest Service recognizes the value of and feels there is a need for security cameras, gates, and a host. Security cameras are installed in an effort to change people's behavior. Law enforcement is already using a variety of tools, including security cameras, to monitor and provide security for recreation facilities throughout the Forest. While gates can sometimes improve security, the proposed gates are intended for administrative use and safety for blocking easy access. Gates are standard component of many developed recreation sites; we have determined they are needed during some maintenance operations (such as hazard tree removal) and government shutdown (due to concerns such as lack of garbage collection). An alternative to gates ("bollards") was also included in Alternative 3. And while the host may also improve security, a host is needed to provide volunteer services such as litter pick-up, providing information to visitors, and other duties. The Purpose and Need for the proposal was clarified to describe these individual needs.

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. A suggestion to remove the fee/reservation site was considered but dropped because it does not meet the need for reservable sites and four sites will not require a fee or reservation. Nonetheless, the comment sparked discussion and the District will continue discussions on how they might simplify the reservation system.

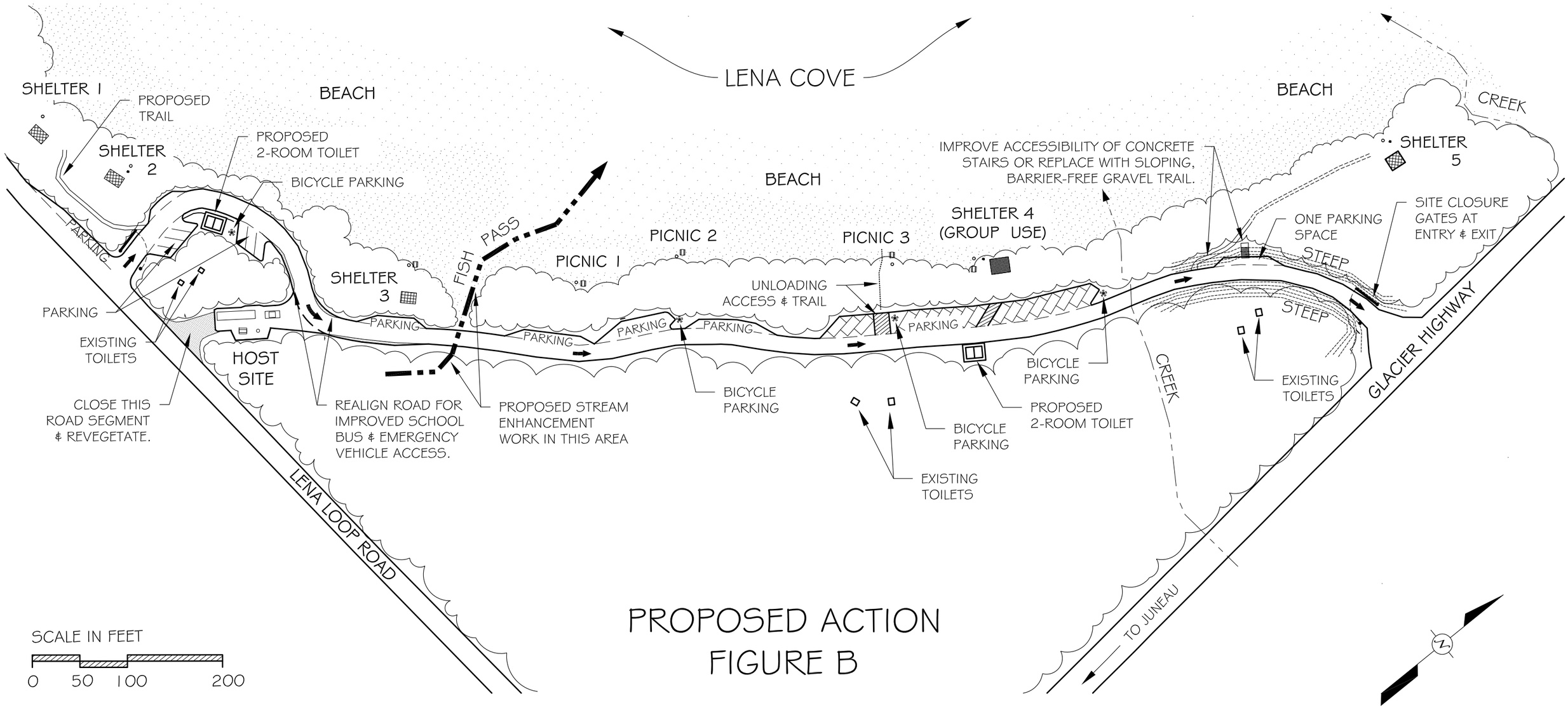
Some comments suggested other alternatives, such as using other groups or existing volunteers as the host. While these alternatives were discussed, they were determined not to be practical or not currently feasible.

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

We also consulted with several agencies on this project. We consulted with the Alaska Department of Fish and Game, and the US Fish and Wildlife Service in developing the fish pass. We consulted with the Alaska Department of Transportation on road design and signs. Consultation with the State Historic Preservation Officer has occurred in the past on this project and is ongoing.

This EA will be provided to all who commented on this project as well as to all those who remained 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 March 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. No appeal period will be provided after the final decision is made.

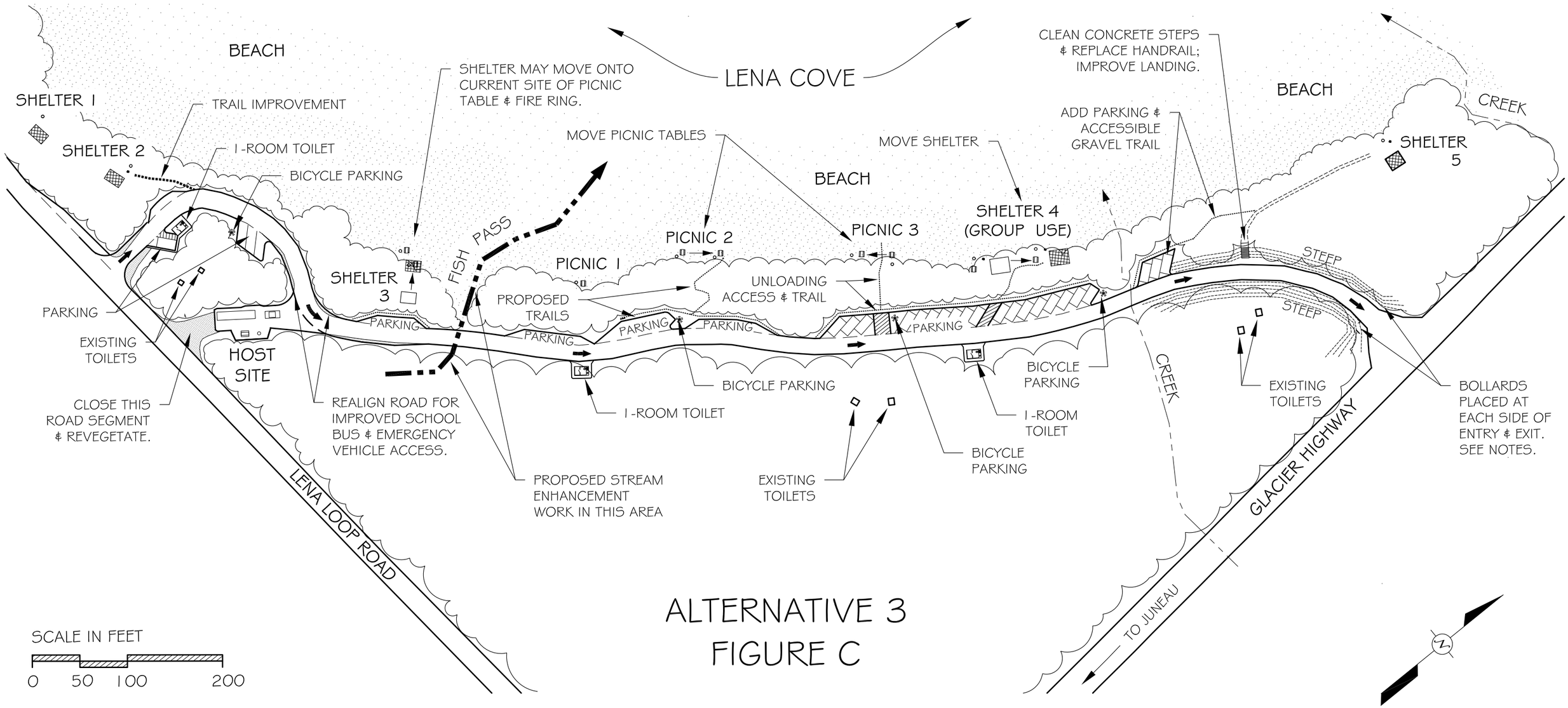


PROPOSED ACTION
FIGURE B

LENA BEACH RECREATION AREA RENOVATIONS

NOTES:

- EXISTING TOILET BUILDINGS WILL BE REMOVED, VAULTS FILLED, AND SITES REVEGETATED.
- FINISHED PAVED ROAD SURFACE WILL BE WIDE ENOUGH FOR ONE-WAY VEHICULAR TRAFFIC PLUS AN ADDITIONAL 4' WIDTH FOR PEDESTRIAN USE, FOR AN OVERALL WIDTH OF APPROXIMATELY 16'. OVERALL WIDTH WILL BE SUITABLE FOR EMERGENCY VEHICLE AND SCHOOL BUS USE. IF BRIDGE IS INSTALLED OVER PICNIC CREEK, INSIDE WIDTH SHALL MATCH ROAD WIDTH.
- MOST PARKING SPACES ARE 10' X 19' MIN. PARKING SPACES DESIGNED FOR ACCESSIBILITY WILL BE 11' WIDE MIN. AND LOCATED ADJACENT TO A STRIPED 5' WIDE ACCESS LANE.



ALTERNATIVE 3
FIGURE C

LENA BEACH RECREATION AREA RENOVATIONS

NOTES:

- TREATMENT OF EXISTING TOILET BUILDING SITES, ROAD SURFACE WIDTH, AND PARKING SPACE SIZING TO BE SAME AS IN PROPOSED ACTION.
- BOLLARDS WOULD BE PLACED AT ENTRY AND EXIT; PORTABLE GATE DEVICES WOULD BE USED IF ADMINISTRATIVE CLOSURE IS NECESSARY (I.E., HAZARD TREE REMOVAL).
- LOCATIONS OF BICYCLE PARKING MAY CHANGE IN FINAL DESIGN. PARKING WILL BE PROVIDED IN LOCATIONS THAT BEST FIT WITH DETAILED SITE DESIGN. EACH PARKING SITE WILL CONSIST OF ONE OR TWO SINGLE LOOP STANDS THAT HOLD 2 BIKES EACH.