

**National Park Service
U.S. Department of the Interior**

**Wrangell St. Elias National
Park and Preserve
Alaska**



Kennecott Operations Plan



KENNECOTT OPERATIONS PLAN

PART 1: MANAGEMENT GOALS AND MANAGEMENT CONCEPTS

The following goals and management concepts were developed in cooperation and consultation with the community of McCarthy/Kennecott. They are statements of purpose and condition for management of the NHL.

1.1 Goals

General Goal: The general goal for management of NPS lands in and around the NHL is to conserve the scenery, natural and historic objects, and wildlife habitat and to provide for the enjoyment of the same by such means as will leave them unimpaired for the enjoyment of the future generations. The focus for management of the Kennecott Mines National Historic Landmark is to stabilize, preserve, and interpret the key patterns, relationships, and remaining structures and features that define the historic, cultural and natural character of the NHL. In some cases, individual features may have such a high degree of historical significance that rehabilitation or restoration is warranted. NPS will strive to meet this general goal while recognizing and working in partnership with the embedded Kennecott community.

Partnerships: The NPS recognizes that a viable and diverse community of individuals and families existed in the area prior to the creation of the NHL, indeed prior to the entire region being designated a national park. NPS will work in partnership with this local community to manage the NHL in such a way as to maintain the character of the local communities of Kennecott and McCarthy. NPS and the Kennecott/McCarthy community define the partnership as an active cooperation trying to achieve mutual goals and objectives. The partnership is mutually beneficial.

Communications: In recognition of the irreplaceable value of local knowledge to the development and implementation of NPS policy, and acknowledging that local residents, non-profit organizations, and businesses provide visitor services and contribute to the rich hospitality experienced by park visitors, NPS will establish frequent, on-going communication with the local Kennecott/McCarthy community. The communications protocol is described in Part 2.

Cultural Resources

Structures: The goal of the NPS Kennecott preservation program is to apply measures necessary to sustain the existing form, integrity and materials of key historic buildings within the Kennecott NHL by repairing and replacing deteriorated roofs, walls and foundations and, in some cases, by replacing and maintaining windows, siding and paint to ensure preservation of historic structures for generations to come. Some historic structures have been specifically identified for adaptive re-use. These will be generally managed at a higher standard consistent with the “Rehabilitation” definition provided in the *The Secretary of Interior’s Standards for Treatment of Historic Properties*. Other historic buildings may be preserved or managed as ruins. Hazardous substance mitigation (lead paint abatement) will be done concurrently with stabilization and rehabilitation of historic structures.

Archeological Features: Preserve archeological resources contributing to the character and interpretation of the NHL. If removal is required to facilitate building stabilization, archeological objects or features will be returned to their original location upon completion of the project. Wrangell-St. Elias National Park and Preserve (WRST) will implement a regularly scheduled inventory of these archeological resources to ensure their retention and assess their vulnerability and stability. Resources determined to be intrusive or non-contributing to the historic district may be removed if they present a safety hazard.

Small-Scale Features: To preserve the character of the landscape and to enhance the interpretive environment, consideration may be given to preserving and/or reconstructing small-scale structures and features. These features include functional and ornamental elements (such as benches), utilities (light standards, utilidors, and water systems) and mining features (such as equipment). Reestablishment or reconstruction of small-scale features must be based on historical documentation. Preference for restoration will be to those features (such as hose houses or utilidors) that may serve some modern use.

Circulation Systems: The majority of existing roads and trails throughout the mill town reflect historic patterns, and these will be maintained whenever possible. Pathways and boardwalks may be reintroduced within the mill town. The addition of new roads within the mill town will be discouraged.

Natural Resources

Vegetation: Existing vegetation throughout the mill town is largely the result of growth since the historic period (1900 – 1938). Limited, selective thinning of vegetation would occur on NPS properties to reestablish historic views and view sheds and to protect the site from the effects of fire and damage to the buildings. The NHL provides habitat for unique and rare plant species that NPS will continue to monitor. Invasive vegetation which is considered a threat to other resources will be controlled and removed whenever feasible. Revegetation of disturbed areas resulting from NPS activities will utilize native seeds/cuttings from local population sources. In some cases re-vegetation with historically accurate, but non-native and non-invasive plants may be considered as part of maintaining the cultural landscape.

Wildlife: The NHL provides habitat for numerous wildlife species. In particular the Kennicott Valley provides important black and brown bear habitat in the form of soapberry patches which has potential for conflict with visitors and residents. NPS will protect wildlife habitat and work to prevent negative wildlife/human interactions, while recognizing that wildlife is a resource for local subsistence use.

Water Resources: Local streams provide water for the community as well as for NPS operations. On NPS lands, NPS will manage the quality of surface waters consistent with the Clean Water Act. NPS will continue to monitor water quality and will consult with the community in developing any necessary mitigation measures in regards to proposed activities.

Natural Soundscape: NPS recognizes that natural quiet is a component of the NHL, the surrounding landscape, and the communities within it. It is also critical to the quality of life of local residents and quality of experience for visitors. NPS will consider impacts of proposed activities on the natural soundscape and will work with the community in developing mitigation measures in order to reduce impacts.

Subsistence: Federally qualified subsistence use is allowed within WRST in accordance with Titles II and VIII of ANILCA. Local residents depend upon the resources from the park for personal consumption, cultural identity, and to maintain a subsistence way of life.

Interpretation

NPS conducted a three day exhibits workshop in Kennecott in early June of 2011 with 13 NPS and regional staff and 17 local businesses, residents, park partners and other community members. Discussions produced valuable ideas for an interpretive approach that will form the foundation for specific interpretive projects spanning the next decade.

Interpretation at Kennecott will enable visitors to learn about the mines and the mill town, the historic relationship of Kennecott and McCarthy, natural resources and the surrounding wilderness, and the contemporary community through a variety of media, interpretive techniques, and programs. Interpretive programs will emphasize the opportunity for self-guided tours and a sense of exploration, utilizing unobtrusive interpretive displays. Where advantageous to the program, the NPS would enter agreements with qualified providers to conduct guided tours and with partners to facilitate fundraising and cooperative projects.

Access/Transportation

As a partner in the community, NPS supports and will manage for long-term pedestrian visitor access to the mill town, utilizing local shuttle systems. NPS will continue to support landowner use of subdivision easements and access to subsistence resources.

Administration and Operations

NPS Utilities and Infrastructure: The goal is to support historic preservation treatments and maintenance, visitor use, and park management in a manner least obtrusive to the historical character of the NHL. Where possible, systems will be designed consistent with historical utility systems and circulation patterns. Serious consideration will be given to use of alternative energy sources, provided they can be employed with minimal impact on the environment, the local community, and the historic landscape.

Hazardous Materials: As part of the acquisition of the Kennecott properties by the National Park Service, a number of stipulations pertaining to hazardous wastes and lead paint were established. The NPS has entered into agreements with the Alaska Department of Environmental Compliance and the U.S. Environmental Protection Agency. Under those agreements, the NPS affirmed its obligation pertaining to the abatement of lead paint hazards in accordance to state and OSHA regulations pertaining to worker safety and training. Hazardous substance mitigation is part of all general management actions and will be consistent with the 1999 Kennecott NHL Mitigation of Hazardous Material Issues Work Plan and with the park's 2003 Hazardous Materials and Waste Management Management Plan for Kennecott NHL.

Visitor and Resource Protection: NPS will manage the NHL to protect the cultural and natural resources of the historic mining district and the surrounding glacial landscape; and provide a safe, educational, and rewarding experience for the area's visitors and residents.

1.2 Management Concepts

The 2001 Interim Operations Plan for the Kennecott National Historic Landmark included a section titled **Management Concepts**. This section described elements of a shared community vision for management of the NHL. The Management Concepts were derived from two primary sources: 1) the set of documents that were produced at the time the NHL was established (including, but not limited to, the 1997 Park Service report "Kennecott Acquisition Past, Present and Future", which supported federal ownership of the NHL; and 2) the Alaska National Interest Lands Conservation Act (ANILCA) of 1980. These

Management Concepts emerged from more than a decade of public discussion preceding the acquisition of the NHL and were put into writing by a local non-profit (Friends of Kennicott) and endorsed by the community in general at the time of acquisition.

In all management activities, the McCarthy/Kennecott community seeks to assure a future in which Kennecott:

- Is stabilized to prevent deterioration of historic structures or artifacts and to make them available to the public, to the greatest extent possible in accordance with public safety
- Is managed with a “light touch” in which projects are undertaken in small steps, at modest costs, with minimal intervention process.
- Is not just an abandoned mining town, but also a place that reflects the vitality, creativity, and community spirit of today’s residents.
- Retains the slow pace, quiet, and spaciousness that foster contemplation and individual reflection. In particular, NPS will encourage visitors to enjoy the NHL as pedestrians, and will seek to minimize the impact of management activities (including, but not limited to, noise and visual impact) on both visitors and local residents alike.
- Is part of a larger community in which residents act both individually and collectively to guide the future of the area.
- Contributes to a strong, reasonably diverse economy that includes locally owned and operated businesses, community-based nonprofits, and traditions of barter and subsistence.
- Protects and honors small-town values: safety, cooperation, self-sufficiency, and personal freedoms consistent with state and Federal laws.
- Is a place where tourism is allowed to evolve within the capacity of the community, rather than a place where external intervention and control accelerate growth.
- Is seen by local residents and visitors alike in its true context: a remote outpost of civilization in the midst of an enormous mountain wilderness.
- Is managed to protect the cultural and natural resources of this historic mining district and the surrounding glacial landscape; and provides a safe, educational, and rewarding experience for the area’s visitors and residents.

The NPS supports the management concepts that the community and Friends of Kennicott have articulated above, with the exception of application of the second bullet statement to preservation of historic structures in Kennecott. The terms “small steps”, “modest cost”, and “minimal intervention” were discussed at a June, 2012 workshop in Kennecott. Workshop group members clarified that these terms are not focused solely on structural stabilization, but rather a broader landscape picture and, importantly, the long term NPS presence.

NPS is legally mandated to operate under the Laws, Regulations, and Policies presented in Section 1.4 of the Kennecott Operations Plan/EA. If a proposal is necessary to meet the Laws, Regulations, and Policies but conflicts with the concepts presented above, NPS must defer to its laws, regulations and policies. If this is necessary, NPS will consult with the community utilizing the communication protocol described in Part 2.

1.3 Permits and Approvals Needed to Implement the Project

Storm Water Permits: The Alaska Department of Environmental Conservation (ADEC) sets water quality standards for Alaska water and regulates discharge into these waters (18 Alaska Administrative Code (AAC) 70). NPS will submit an electronic Notice of Intent (NOI) to ADEC prior to initiation of construction activities (<http://www.dec.alaska.gov/water/wnpssc/stormwater/APDESeNOI.html>) and

prepare the Storm Water Pollution Plan in accordance with ADEC's General Permit Number AKR100000, Storm Water General Permit for Large and Small Construction Activities.

Wetlands Permit: While impacts to wetlands are not anticipated, Waters of the United States could be impacted by work in Bonanza or National Creeks. Any construction projects involving permanent alterations to these creeks would require a General Permit (GP) from the Anchorage District of the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA). If the area of impact is less than half an acre, the project(s) might qualify for a nationwide permit; otherwise, individual permits would be necessary. In addition, Section 401 of the CWA requires State water quality certification or waiver of certification prior to issuance of a Section 404 permit.

Alaska Department of Transportation and Public Facilities (ADOT&PF) Permits: The ADOT&PF may require permits for any use or modifications of the McCarthy Road and/or its right-of-way (ROW). The NPS would acquire the necessary authorization from ADOT&PF for the project.

PART 2: MANAGEMENT ACTIONS

2.1 Communications

In recognition of the irreplaceable value of local knowledge to the development and implementation of NPS policy, and acknowledging that local residents, non-profit organizations, and businesses provide visitor services and contribute to the rich hospitality experienced by park visitors, NPS will establish frequent, on-going communication with the local Kennecott/McCarthy community. The communication protocol will consist of the following elements:

- The Superintendent and/or park planner will be responsible for setting annual spring and fall meetings. These will occur prior to Memorial Day and Labor Day and will be held at the Tony Zak Community building. The spring meeting will be an announcement of all proposed actions for the area that season. The fall meeting will be a review of the season's actions and expectations for the following year. The fall meeting will emphasize what project planning/compliance might occur during the course of the winter and how or when public involvement might occur. Spring and fall meetings will be intended to be brief and primarily informative, encouraging maximum participation.
- The spring/fall meetings will be supplemented with a series of additional in-depth meetings held in Kennecott/McCarthy during summer months to discuss particular issues of concern. These meetings will be held as needed and advertised at least two weeks in advance. As time and budget allow, these meetings will be structured as working groups in order to share information and open up a productive, conversational dialogue to define issues and brainstorm solutions; as opposed to a "public meeting".
- Once every five years, the park will initiate a review of the Kennecott Operations Plan, seeking full community input in advance of adopting any revisions to the current plan. These reviews will focus on any discrepancies between the plan and its implementation.
- A park leadership team member will attend each MAC meeting. The park leadership team generally consists of the park superintendent and the division chiefs.
- Provide a web-based educational component regarding projects at Kennecott. This will include a generalized overview of how projects are entered into the budget system, and where and when project design, contracting, and NEPA and NHPA compliance occurs. Identify points in the process where there are opportunities for public involvement. These materials will be posted on the park's website and on the Friends of Kennicott website.
- Continuation of the annual Superintendent's letter.

The park will inform the community with advanced notice of all issues requiring their input and the schedule and location of all meetings, through announcements at the mail shack and in the local paper, and through the community e-mail database. A list of participants will also be recorded and kept as part of the meeting record.

Local Hire

WRST was established by ANILCA. Within that act is a provision in title 13 section 1308(a) whereby Congress directed the Secretary of Interior to establish a program under which “any individual who by reason of having lived or worked in or near a conservation system unit, has special knowledge or expertise concerning the natural or cultural resources of such unit and management thereof (as determined by the Secretary), shall be considered for selection for any position within such unit” without regard to nationwide, standard open hiring procedure.

WRST has a proven track record of utilizing this local hire authority throughout the park and particularly in the McCarthy/Kennecott area. Local hires are invaluable for the local knowledge they bring to NPS programs as well as providing efficiency in housing for remote locations. The National Park Service will continue to look for opportunities to hire locally, while remaining compliant with Federal personnel requirements.

2.2 Covenants and the Architectural Control Committee

The Architectural Control Committee (ACC) was created in 1976, prior to NPS purchases in Kennecott, by the Great Kennecott Land Company to oversee neighborhood covenants in the Millsite Subdivision that are intended to keep the historic atmosphere of Kennecott intact. The Millsite Subdivision’s covenants are described in the Kennecott Subdivision Declaration of Restrictions, dated September 15, 1976. These covenants describe building restrictions, conditions of subdivision easements, composition of the Architectural Control Committee, process for revision of the covenants, and covenant enforcement. Since NPS acquisition of lots in the Millsite Subdivision in 1998, the park’s Superintendent has served as the ACC chair.

The Architectural Control Committee and NPS worked with interested lot-owners during the summer of 2010 to revise the covenants. This effort was dropped due to the highly polarized comments received from lot-owners regarding the proposed changes, which included proposed changes to the composition of the ACC (to provide for more non-NPS representation) and changes to the voting procedure. Consequently, the ACC will continue to operate under the existing covenants for another ten-year period (until 2020). The NPS, as a lot-owner in the Millsite Subdivision, has been and will continue to be a willing participant in future efforts to revise the covenants.

While the ACC may serve to notify lot-owners of non-compliance with covenants, it is not the ACC’s responsibility to enforce the covenants. According to the Declaration of Restrictions, “If any lot owner or their successors shall violate or attempt to violate any of the covenants herein during the period for which they are enforced, it shall be lawful for any person owning any real property subject thereto to prosecute any proceedings at law or in equity against the person or persons violating or attempting to violate any such covenants, and prevent him or them from so doing or to recover damages for such violation.” NPS has the same rights and responsibilities as other Millsite Subdivision property owners regarding covenant implementation and enforcement. The NPS is willing to work with Millsite landowners and other

stakeholders on ways to improve management of covenants that maintain their effectiveness, provide for reasonable flexibility, and reduce the need for legal action as a management tool.

2.3 Visitor and Resource Protection

Emergency Medical Service (EMS)

The NPS will continue to develop area-wide EMS response in partnership with local individuals, organizations and EMS providers inside and outside the community. The NPS supports the development of an EMS function within the Kennecott-McCarthy Volunteer Fire Department (KMVFD) that would have primary EMS-response duty on private land in the Kennecott-McCarthy area. The NPS will remain the primary EMS provider on NPS-managed lands, but may provide EMS service on non-NPS-managed land, under specific circumstances. The authority for providing EMS assistance to neighboring communities and outside agencies is specifically provided for in 16USC1b(1), “Rendering of emergency rescue, firefighting, and cooperative assistance to nearby law enforcement and fire prevention agencies and for related purposes outside of the National Park System”. The NPS will seek a cooperative agreement with the KMVFD that would address agency cooperation related to EMS and firefighting response. The NPS will continue to coordinate emergency response training and encourage participation by all interested parties. All EMS functions performed by the NPS will be in accordance with NPS Director’s Order #51 (EMS), the WRST Emergency Medical Services Plan and under the direction of the Park EMS Medical Advisor. The NPS supports the Park’s EMS Medical Advisor’s providing advice and oversight on EMS to the KMVFD and area guide services.

Search and Rescue (SAR)

The NPS will continue to provide SAR response within the NHL and greater park area. Major EMS and SAR incidents can quickly overwhelm local NPS staff resources. Due to this, the NPS supports an on-call EMS/SAR team of non-NPS responders. During an emergency incident, EMS/SAR team members would be hired and paid for the duration of that incident using the AD/Emergency Hire System. During on-call time, EMS/SAR team members are considered volunteers and are not paid. The NPS will continue to provide SAR training to staff and area volunteers. NPS will operate within the Incident Command System. The NPS will work to improve radio communication with other agencies, such as the KMVFD and AK State Troopers.

Fire Response

Protection of structures from wildland fire will be accomplished through the proposed clearing and thinning of vegetation around structures, as well as suppression response from NPS staff and the KMVFD. The NPS will work closely with KMVFD and State of AK Division of Forestry to develop appropriate fire response strategies. The NPS will continue to work with land owners adjacent to NPS-managed lands on fire fuels reduction. The NPS supports the development and implementation of Alaska Department of Natural Resources (AKDNR) Community Wildland Fire Protection Plan. The NPS prohibits fires on NPS lands within the millsite, 36CFR13.1904. Fire extinguishers are maintained in all NPS properties. NPS staff is limited in structural firefighting capability and qualifications and are not certified to enter a burning building.

According to the National Fire Protection Association (NFPA), the single largest cause of fire in historic buildings is arson. Regular patrols of the NHL would be conducted by NPS personnel to guard against this threat. A winter caretaker will be considered to provide overall site security.

Bear-Human Conflict Management

The NPS will continue to address this issue through education of NPS staff, visitors and area residents on appropriate behavior around bears and through enforcement of the Park's food storage regulation. Placement of additional bear-resistant garbage cans will be considered if need increases. When necessary, the NPS will actively manage bear behavior if the animal poses a threat to human safety. The NPS will impose emergency closures when necessary to protect human safety. Trails through soapberry patches will be monitored for bear activity.

Law Enforcement

The NPS will continue to provide a prevention-based law enforcement program in the NHL. Emphasis will be placed on education and enforcement of regulations that protect visitor safety and the area's natural and cultural resources. A memorandum of understanding will be maintained with the AK State Troopers, allowing for mutual assistance between the agencies when necessary.

2.4 Acquisitions

NPS acquisition of properties within the NHL has been and will continue to be contingent on willing sellers. If approached by a willing seller, NPS prioritizes potential acquisitions within the NHL based on the following criteria:

- Protection and management of the historic landscape.
- Ability of the property to support NPS operations.

NPS will continue to follow Departmental policies and American Society of Testing and Materials International (ASTM) standards regarding the screening of properties for environmental liabilities posed by acquisitions.

2.5 Transportation/Access

Kennecott Arrival/Orientation

The park held a public meeting in summer 2012 to discuss the arrival and orientation of visitors to Kennecott.

The following items were discussed and decided:

- Shuttle van drop off and pick up needs to best accommodate those businesses that are providing that service. In light of this, shuttle van pick ups and drop offs will continue at the current location (between the Blackburn school and St. Elias Alpine Guides office) with occasional overflow pick-ups and drop-offs at the shuttle turnaround.
- To provide the best visitor orientation, the shuttle turnaround will be linked via a raised boardwalk to the Blackburn school. The existing deck behind the Blackburn school will be expanded and roofed to provide a covered seating area. A bulletin board will be installed in this area. The existing outhouse will be expanded to provide men's and women's vault toilets. Additionally, there will be some identifying feature (sign, arrowhead on the door) visible to those getting off shuttle vans that identify the Blackburn building as an NPS facility.
- NPS will avoid parking in the space north of the Blackburn building.

Motor Vehicle Use Within the NHL

Use of the rights-of way in the NHL is governed by the Kennicott Subdivision plat filed with the State of Alaska by the Great Kennecott Land Company in 1976. Local landowners accepted the conditions of the plat when they purchased their land, prior to the acquisition of the remaining parcels by WRST in 1998. The NPS is a neighbor of landowners within the subdivision and recognizes that it is bound by the same conditions.

The Kennecott subdivision plat filed with the State of Alaska specifies that “the rights-of-way as shown or noted are private, reserved for the use of the present owners of lots in this subdivision and their guests, but not the public in general.” The NPS supports park visitors coming to the NHL in a non-motorized fashion and utilizing local shuttle services to access the site because of the complexity of motorized access to the millsite subdivision, and the effects of motorized use on visitor experience.

A community workshop was held in Kennecott in the summer of 2012 to discuss access to the millsite subdivision and to discuss parking. The workshop addressed these issues over a 3-night period and was well attended by local business owners, millsite subdivision lot owners, and those supporting motorized access. NPS facilitated the meeting and the group developed the following vision statement for access to the millsite subdivision:

- Access to the millsite subdivision is predominantly through shuttle services and other non-motorized means. Vehicle access and parking will be managed to minimize impacts to visitors and residents, minimize congestion and maximize safety.

The NPS is committed to working with the community towards achieving this vision. The following action items, which focus on education, were identified by the workgroup:

- All educational materials will be developed in consultation or partnership with community members. Signage should be minimized and aimed at effective conveyance of information. Land status maps that clearly show intermixed land pattern would be used. Signs can include “bullet statement” messages. Kiosks with signs meeting these standards have been installed at the footbridge and the airport. Signs placed on NPS lands will conform with the Sign Guidance identified in the Cultural Landscape Report.
- Brochures: to be developed in partnership with community. Should include information on the following: Why this place is different. This is a community; respect that there are people walking on the roads, it is a shared trail. Describe physical characteristics that lead to safety concerns. Encourage the use of shuttle services and alternatives.
- Brochures to be distributed at Sportsman shows, to motorized groups and other outreach opportunities, including Fairbanks (to reach dipnetters). Also distributed around westside/McCarthy/Kennecott and by businesses.
- Websites: Can display information similar to brochures. Visitors use websites for trip planning. Other websites possibilities: Friends of Kennicott, local businesses.

The community expects NPS to set an example regarding motorized access. In recognition of this, NPS is committed to maintaining a usable employee shuttle service and encouraging employees to use it. Visiting NPS staff need to be conscious of minimizing motorized trips between McCarthy and Kennecott.

Subsistence ORV use: The use of Off-Road Vehicles by federally qualified subsistence users in the area is authorized by 36 CFR 13.460, which allows the use of “surface transportation traditionally employed”. The 1986 Wrangell St. Elias National Park and Preserve General Management Plan made the determination that ORVs were a traditional means of access for subsistence purposes in the park. This Kennecott management plan does not propose any restrictions on this activity.

Parking

Kennecott residents and the park agree that Kennecott has very limited parking space. In consultation with the local community, the park has identified the following action items:

- Provide limited (10-space) designated parking in the dairy barn area. Users to include: handicapped; local use for non-shuttle times; special events; visitors; and lot owners with no property access. Additionally, NPS has established and will continue to maintain a parking area for employees and contractors near the Dairy Barn. NPS will run a shuttle for employees that live on the West Side or McCarthy but work in Kennecott, so as to minimize park vehicle traffic.
- Consider options for a pedestrian trail from the designated public parking in the Dairy barn area to the shuttle bus turnaround or Blackburn school area.
- When access to private property is restricted due to winter conditions, Kennecott landowners will be free to park on the main rights-of-way within Kennecott.
- WRST will work with the local community to support an efficient public shuttle system and adequate hours of operation, to reduce the need for parking within the NHL.
- The park will develop a public education campaign through the park's website, signs, and brochures at information kiosks in Kennecott/McCarthy and along the McCarthy Road, informing the public of the local shuttle system and the lack of public parking in the NHL.
- No parking at the shuttle turnaround (after a parking spot is designated).
- No parking on NPS owned portions of easements in the millsite subdivision.
- Utilize restored features (boardwalks, railroad rails) to discourage parking.
- A 10 mph speed limit will be posted through the Kennecott subdivision, posted at the NHL boundary.

Roads

Alaska State ROW, McCarthy to Kennecott: NPS will encourage ADOT&PF to design the rail corridor road as a one-lane gravel road that maintains its historic character with a 25-mph speed limit designed to accommodate safe vehicle passing.

Subdivision easements within the NHL: A cooperative agreement will be sought with NHL lot owners and businesses to address NHL road maintenance.

Wagon Road: Segments of the Wagon Road that occur on NPS lands will be managed primarily as a pedestrian trail, with allowance for motorized use for those accessing private property along the trail and for federally qualified subsistence users engaged in subsistence activities.

Toe of the Kennecott Glacier Road: This road traverses private land, university sub-division lands, and finally NPS lands . The NPS portion of this road will be designated a park road, open to motorized use. Motorized travel on NPS lands off the designated road will only be allowed for federally qualified subsistence users engaged in subsistence activities.

Walk-In Campground

The concept of a walk-in campground has been proposed and evaluated twice (a 2002 Environmental Assessment and this Kennecott Operations Plan and EA). The proposal would designate 42 acres of land east of Kennicott River for primitive tent camping. The site under consideration is one mile northeast of McCarthy and 0.35 mile from McCarthy Airport. Campground facility development and amenities would include vault toilets, bear-resistant trash receptacles, bear-resistant food storage boxes, and centralized food storage area. Access to the campground would be provided by local shuttle vehicles and non-

motorized methods. Routes of access would be either the trail described above, or from McCarthy airport using public rights-of-way (Kennecott-McCarthy Road and/or the Wagon Road) crossing a platted subdivision on nonfederal land. NPS rangers would patrol the campground to ensure compliance with food storage, non-motorized access, and other regulations.

Concerns have been expressed by the public regarding potential human-bear conflicts with such a development. The effects of the proposed campground on bear habitat and on potential bear-human conflicts are discussed in this EA. Despite mitigation provided by bear-resistant facilities, the NPS is still concerned about this as a potential problem at this site. NPS is also concerned about our ability to effectively maintain and manage such a facility, particularly when other privately owned facilities exist in the area. Consequently, this project is not been submitted for funding nor is it considered a high funding priority for the park.

Trails and Glacier Access

Kennecott is not just a historic site; one of the most common and important activities undertaken by visitors to Kennecott is use of the hiking trails that provide access to surrounding frontcountry and backcountry, including the heavily visited Root and Kennicott Glaciers. Two of the most popular hiking trails in the park are included, in their entirety, within the boundaries of the Kennecott NHL: trails to the Root Glacier and to the Bonanza/Jumbo Mines. Management of these and other trails and associated visitor activities is therefore central to the Kennecott Operations Plan. This section addresses trails which provide access to the surrounding frontcountry and backcountry from the Kennecott townsite, including the following: 1) the Root Glacier Trail with connections to the glacier itself and the Erie Mine area; 2) the Bonanza Trail with connections to Bonanza and Jumbo Mines; 3) the “Wagon Road” towards McCarthy, and 4) a proposed trail alongside the Kennicott Glacier towards the Kennicott River footbridge with connection to a proposed walk-in campground. Short pedestrian trails and boardwalks within the Kennecott townsite are discussed elsewhere in this document (see proposals listed under “Circulation and Access” for the Industrial, Administrative Core, and Residential A zones), but we note here that these shorter trails work in concert with frontcountry/backcountry trails to promote and preserve a pedestrian-oriented experience within and around the NHL.

All frontcountry/backcountry access trails will be managed and maintained as pedestrian-oriented trails with accommodation, where appropriate, for permitted uses of motorized vehicles by local residents and their guests and for subsistence activities. To preserve the natural character of the area surrounding the NHL, regulatory and interpretive signs will be kept to a minimum along the corridors of these trails, but a strong emphasis will be placed on provision of educational and interpretive information at trailheads and within the NHL itself. This information will be delivered by an appropriate combination of posted signs and maps, available pamphlets and self-guided tours, and direct contact by NPS rangers and other interpretive partners, and will collectively emphasize the following: 1) safe and low impact travel techniques in the front and backcountry, including bear safety; 2) interpretation of natural/cultural/glacial history of the surrounding area, and 3) appropriate locations and practices for hiking, camping, picnicking, food storage, use of toilets, etc., with an emphasis on protecting natural resources and private property. Patrolling of trails will be provided at a level sufficient to enforce visitor observance of these practices.

NPS will construct a 3.5 mile pedestrian trail to the NHL from the footbridge over the east (dry) fork of Kennicott River. The route will generally follow the east side of the Kennicott Glacier, staying well away from private property, from the viewshed of the railroad corridor, and from popular swimming areas at the toe of the glacier. Route planning will incorporate community input and will take into account the evolving viewshed as the Glacier continues to thin and retreat. At the north end, the foot trail would connect with the old Wagon Road in the vicinity of the West Bunkhouse or Company Store. The trail

would be constructed and maintained exclusively for non-motorized use, with a tread approximately 2 feet in width constructed of unconsolidated outwash and existing moraine material, and with minimal alterations of grade as necessary only to ensure safety and that water will move off the trail.

2.6 NPS Utilities and Infrastructure

Mill Site Water System: The design for the water system is still underway and the Kennecott Operations Plan/EA will not serve as the NEPA compliance document for the water system. Instead, once specific design details are known, the project will be presented and analyzed in a separate EA. The EA would consider the impacts of the proposed system on water quality and quantity, vegetation, wildlife, area access, scenic quality, and the integrity of the cultural landscape. The comments submitted by the MAC subcommittee and individuals regarding the water system will be retained and addressed in that site-specific EA.

Components of a water system may include a water source (either a well or water intake from Bonanza Creek); a water storage tank; waterline between intake and the storage tank; water treatment; water distribution lines for potable water and/or limited fire suppression.

Sanitary Sewer System

Collection, treatment and disposal of sewage (wastewater) generated by visitors and staff in NHL buildings and on the west side of the Kennicott River will be achieved primarily by septic systems (septic tanks and leach fields).

The NHL buildings that could potentially be equipped with sewer service are the Dairy Barn, Old School, New School, West Bunkhouse, and Company Store.

The existing ADEC approved septic system and leach field has been expanded to service the Dairy Barn property acquired in 2005. The Store, West Bunkhouse, New School, Old School and Dairy Barn would be serviced by this system field.

Excavations would be made along the west side of the site behind the Store and under the historic wagon road. About 1050 lineal feet of buried sewer line from the Store to the Dairy Barn would be provided. Sewage lift station(s) may be required. The lift station would be installed in a buried manhole in the line between the Store and Dairy Barn. A total of 6-8 manholes would be constructed.

Power Generation and Distribution

A power generation and distribution plan will be developed based on projected power requirements for the next 10 to 20 years. The plan and subsequent design will take into account expansion of the system and use of alternate energy sources of power generation including hydro and solar power at Kennecott NHL. This information would include projected costs and the total hours of generator time that would be reduced/saved with alternative systems installed.

The generator located south of the Dairy Barn will continue to provide power for NPS operations at Kennecott as other alternatives are considered. NPS will construct an enclosure around the generator connex in order to mitigate noise production and visual impact.

Airport Operations Facility/office and lots

Installation of a co-gen unit to supplement existing power generation and provide heating capabilities occurred in 2011. Long term intent is for this area to serve as the telecommunications hub for Kennecott and west side NPS facilities and serve as a winter office. This office also will serve as an incident command post and provides an aviation support function.

The NPS acquired a 5 acre lot adjacent to the McCarthy airport in 2012. This lot was acquired with the intent of future development to provide support for NPS operations in the McCarthy/Kennecott area. While no specific site plan has been prepared, the lot may be developed to include the following:

- Water
- Year-round housing unit (at back of lot)
- Seasonal housing
- Staging area for materials and supplies
- Communications hub
- Secure storage area

A specific site plan and development of the area will be handled in a separate compliance document and will be done in communication with the community.

Solid Waste Management:

NPS supports working with the community to deal with solid waste issues, by promoting pack in/pack out concepts for visitors and landowners alike, and by supporting a recycling program. Bear proof garbage containers have been installed in Kennecott and the kiosk on the west side. Bear proof recycling containers will be installed at the Company Store and at the old school in Kennecott. NPS supports the development of a privately owned solid waste transfer facility and would consider utilizing such a facility if economically viable.

West Side Development

With NPS acquisition of a five-acre lot adjacent to the McCarthy airport, further development at west side will not be considered. Cabanas that are currently located in the Dairy Barn area at Kennecott may be re-located to west side. This will not require any further development of the area.

2.7 Zone by Zone Actions

Archeological Resources, all Zones: Wherever feasible, all categories of archeological resources identified in the 2000 Cultural Landscape Report will be retained on the landscape. If removal is necessary for public safety or to facilitate building stabilization, archeological resources will be re-located as close to the original documented location as possible.

2.7.1 Administrative Core Zone

Vegetation: The following vegetation clearing will be done around all historic structures on NPS lands in this zone, for fire and windfall protection; and for access to the buildings:

- Clear all spruce within 30' of all structures.
- Limb spruce trees up to 10' above the nearest surface fuel within 100' of all structures.
- Clear all woody vegetation within 5' of all structures.
- Selectively clear or plant other vegetation to maintain quality viewsheds.

Invasive plant species will be managed consistent with the 2010 NPS Alaska Region Invasive Plant Management Plan and EA. This document and Finding of No Significant Impact (FONSI) describe the following elements of invasive plant management:

1. Continue physical control methods where effective.
2. Allow limited use of herbicides to control infestations not responding to physical control methods; and
3. Implement mitigating measures with best management practices and monitoring of overall program effectiveness and environmental effects.

Revegetation: Where needed native vegetation may be planted to screen modern NPS facilities using native seeds/cuttings from local populations. In some selective cases historically accurate non-invasive non-native plants may be planted to enhance the cultural landscape.

Circulation/Access: The following are proposed for this zone:

- Improvement and maintenance of a pedestrian trail from the General Manager's Office, up the creek to the footbridge, connecting to the top of the mill building. This trail would connect with the Old Wagon road and Silk Stocking Loop described in the Residential A zone.
- Where historically appropriate, reconstruct hose houses that will be used to store limited wildland fire suppression supplies (such as backpack pumps or extinguishers).

General Manager's Office

Stabilization: Cyclic maintenance. For most preserved or rehabilitated historic structures, cyclic maintenance means repairs to roofing, windows (re-caulking), and re-painting on a 5 – 10 year cycle.

Small scale features: Reconstruction of boardwalk and stairs from GMO to Hancock addition.

Interpretation: Opened to the public in 2009. Enhance the sense of discovery by developing a hands-on resource space for corporate history. Plan components include durable, functional period workplace furnishings, mostly large tables and office chairs, and tabletop magnifying glasses, reinstallation of refinished drafting table and storage drawers that were taken out of the building during restoration and currently stored in the Machine Shop, and interpretive panels that introduce corporate leadership, including financial investors, and their on-site jobs. Part of self-guided walking tour and guided tour with concessioner.

Vegetation: Re-vegetate area with native seeds/cuttings from local populations.

Hospital

Stabilization: Implement interior false-work to keep walls, floors and roof from collapsing. Maintain a roof. No interior access proposed. No painting proposed.

Interpretation: Manage and interpret as a ruin. No interior access proposed. Part of a self-guided walking tour. Modify existing accessible windows so that visitors can see inside.

Assay Office

Stabilization: Will move salvageable remains of the building back to its original location.

Interpretation: Manage and interpret as a ruin. Part of a self-guided walking tour.

Vegetation: Remains of the building will be kept clear of tall woody vegetation for viewshed and fire protection.

Railroad Depot

Stabilization: Cyclic maintenance. Restore electrical systems.

Interpretation: Opened to the public from 2004 - 2007 as a visitor center. Replicate original Wells Fargo and Railroad Depot signs. Produce at least one panel for the interior. Part of a self-guided walking tour and guided tour with concessioner.

Sawmill and Carpenters Shop

Stabilization: None. Allow ruin to deteriorate in place.

Interpretation: Manage and interpret as a ruin. Part of a self-guided walking tour.

Vegetation: Keep the site and the margins around it free of vegetation in order to interpret as ruin and to protect from fire/rot. Selective thinning to improve and/or maintain views.

Company Store

Stabilization: Work to include: Level 1--construct public restrooms, complete field lab area, interior finishes, lights, elevator/lift to Level 2 and 3, install utilities and additional furnaces. Level 3--construct staff office area, interior finishes, lights and communications. Maintain as visitor contact point and administrative office space.

Vegetation: Thin some trees to open up viewshed in front of deck area.

Interpretation: Opened to the public in 2009. Maintain as primary exhibit space with visitor access. To minimize interpretive intrusions in the town, the General Store will provide a central interpretive focus and a place to fully develop the landmark's primary stories. Given the need for durability and low maintenance, the full range of exhibit techniques can be used including hands-on and interactive media. Replicate original Post Office and General Store sign and open the post office for general public access. Consider developing the outside area of the front and back of store as a gathering place for visitors.

Small scale features: Maintain Hoist House #52. Clear random building material from interior, strong interpretive value. Re-establish cribwall/utilidor from Company Store to the end of the Carpenter's shop.

Railroad Trestle

Stabilization: Minor finish work such as closing up utilidor. Cyclic maintenance.

Interpretation: Part of a self-guided walking trail.

Vegetation: Selectively clear for viewshed of glacier and tailings retaining wall.

National Creek Re-Channelization

Stabilization: Based on the geotechnical evaluation of National Creek, we know that the rock glacier at the head of the valley continuously contributes a large sediment load to the stream. Engineering for stream rechannelization identified the need for the periodic removal of sediment. Removal will require periodic excavation from the stream bed to retain its current configuration. Excavation will require the use of heavy equipment such as backhoes and dump trucks. Planted materials in the actual streambed will be periodically impacted.

2.7.2 Industrial Core Zone

Vegetation: The following vegetation clearing will be done around all historic structures on NPS lands in this zone, for fire and windfall protection; and for access to the buildings:

- Clear all spruce trees within 30' of all structures.
- Limb spruce trees up to 10' above the nearest surface fuel within 100' of all structures.
- Clear all woody vegetation within 5' of all structures.

Selective thinning for viewshed will also be undertaken in order to enhance views. Specific areas of consideration in this zone will be on NPS lands along the Portal trail above the mill building and along the trail linking the GMO to the top of the mill building. Revegetation of disturbed areas (such as proposed water lines) will be conducted utilizing native herbaceous vegetation seed collected from the surrounding area. Such plantings will also be considered in order to screen certain views. In some selective cases historically accurate non-invasive non-native plants may be planted to enhance the cultural landscape. Area will continue to be monitored for invasive plants and populations of such will be controlled and removed.

Circulation/Access:

- Construct accessible trails and boardwalks behind the power plant, machine shop, and leaching plant.
- In cooperation and consultation with private lot owners, consider restoration of boardwalks and/or railroad within this zone as a tool to control parking.

Tram Terminus

Stabilization: Work to include structural repairs to the upper mill including the tram deck, structural reinforcement to ore bin, floor repairs, and reconstruction of upper tram deck and roof. Dependent on funding, construction of a protective roof structure over the upper tram deck and roof may be considered rather than reconstruction.

Interpretation: Open to the public as part of a concession tour.

Vegetation: Maintain scenic views through continued brushing.

Concentration Mill

Stabilization: Work to include structural repairs including foundation repairs and column and truss repairs Levels 1 through 7. Mock-up for project to test internal stabilization methods was performed in 2011, with other work scheduled for 2012 and 2013. Repairs to the mill to repair the foundations and reestablish deteriorated timber crib retaining walls will require site disturbance during the period of construction. Once completed, the landscape will be restored.

Additional work dependent on funding will include structural repairs to the mill structure at Levels 8 and above. This work will include foundation and column and truss repairs, new roof construction, and stabilization of the ore bins.

The intent of the proposed work is to stabilize the structure for a guided visitor opportunity. Long term (more than 10 year) plans would include siding repairs and replacement and painting. Window repairs and replacement may be required to protect the interior of the building and to provide draft control as part of future fire suppression within the mill.

Recent work has been done to identify and delineate the deposition of detonation cord and blasting caps on the north side of the mill building. The inventory revealed the presence of large amounts of debris (estimated between 1500 and 1800 cubic yards) on the north side of the mill building potentially containing undetonated blasting caps. This area will continue to be posted as closed as long as the site is hazardous. Some of the mill building stabilization efforts identified above will require working in this area. Site specific mitigation of the hazard, through removal of the debris material, will occur prior to work being conducted in these specific areas. Removed material will be taken to a safe area, screened for blasting caps, and burned. Long term, much of the debris potentially containing blasting caps may remain on site. The area will be clearly posted and, if necessary, physical barriers will be put up at access points.

Archeological resources: Replace ore chute. Minimize disturbance to other interior and exterior archeological resources during stabilization.

Interpretation: Interpretation of the stabilized mill building through partnership/concession-led tours that meet NPS standards for interpretation. In the Sacking Garage, bring the sacking process to life by displaying an original flat car loaded with burlap bags filled with ore, show the sacking and stacking process with working pulleys to raise and lower the chute, and reinstall the original tracking scale and winch used to pull cars back and forth.

Small scale features: Track inclines on north and south sides of mill building will be brushed or otherwise cleared and managed as ruins; reconstruction of roof enclosure will occur on the utilidor along south edge of mill building. Internal stabilization of scale house and lab sheds.

Leaching Plant

Stabilization: Ongoing work to include repairs to halt collapse onto railroad corridor, site stabilization, foundation replacement, repairs to floor and wall structure, lead paint mitigation (including painting), rehabilitation of doors and windows to control access. Scheduled work includes structural repairs to the walls of the leaching plant including column realignment and footings, shear wall repairs, truss repairs, and asbestos abatement. Allow south addition to collapse and manage as a ruin. Implement interior false-work/rigging to keep ruin structure from collapsing onto the railroad corridor or into the north addition. No interior access proposed in the south addition.

Interpretation: Continued tour opportunity with mill building. North sacking shed identified for future milling exhibit to accommodate physically challenged visitors that cannot access the Mill. Exhibits could include installation of original equipment such as shaker tables and crushers that demonstrate the different milling processes.

Small scale features: Stabilization/reconstruction of bracing and the original track incline for the leaching plant deck, north of leaching plant. Reestablish the deck at the north elevation with an integrated accessibility ramp into sacking shed.

Machine Shop

Stabilization: Scheduled work to include reestablishment of collapsing service decks on north and south sides, door and window repairs, siding repair, and reconstruction of a porch roof over the east entrance.

Interpretation: This is the largest open interior space in Kennecott, and could be used to display original machinery such as the overhead hoist, forge, drive shaft, and belts, as well as return original machines and tools that were purchased in 1938 and shipped to Dunkle Mines. Produce at least one panel for the interior. After proposed structural repairs, building will be open to the public. Part of a self-guided walking tour.

Power Plant

Stabilization: Mediate oil and asbestos in the area. Boiler and stack preservation treatment. Window repair/lead abatement including painting.

Interpretation: Roadside viewing platforms opened to the public in 2006. Maintain the one interpretive exhibit panel on upper mezzanine. Inside tour could be led by a concessioner on an ADA rampway. Exterior and upper decks can be part of a self-guided walking tour.

Small scale features:

- Stabilization of structure members (those affected by fire of the south deck of the power plant).
- Reconstruct small section of boardwalk with stairs west of power plant.

Transformer House

Stabilization: Repair or replace missing windows and doors and paint. Landscape to improve drainage away from building.

Interpretation: Not open to the public. Part of a self-guided walking tour. Modify existing windows so that visitors can see inside.

2.7.3 Commercial Zone

Vegetation: The following vegetation clearing will be done around all historic structures on NPS lands in this zone, for fire and windfall protection and to maintain public access:

- Clear all spruce trees within 30' of all structures.
- Limb spruce trees up to 10' above the nearest surface fuel within 100' of all structures.
- Clear all woody vegetation within 5' of all structures.

Vegetation screening will be considered in this zone, particularly to screen the Dairy Barn area from the shuttle turn-around viewshed. Views of the glacier will be maintained. Disturbed area revegetation will be considered as needed utilizing native herbaceous vegetation seed or historically accurate plantings collected from the surrounding area. In some selective cases historically accurate non-invasive non-native plants may be planted to enhance the cultural landscape. Area will continue to be monitored for invasive plants and populations of such will be controlled and removed.

Refrigerator Plant

Stabilization: Cyclic maintenance. Re-construct cribbing walls.

Interpretation: Opened to the public in 2008. Part of a self-guided walking tour. Produce at least one panel for the interior.

Small scale features: Restore historic ramp to the railroad corridor. Restore boardwalk.

West Bunkhouse

Stabilization: 2013 work included exterior rehabilitation consisting of floor and wall repairs, construction of exterior shear diaphragm, siding repair and painting, repairs to doors and windows. Retain interior options for potential partnerships and/or interpretation. Depending on the nature of future partnerships and the adaptive re-use of this building, it may be necessary to make significant changes to the building to protect occupants from fire, to meet operational needs of the users, and to install electrical, heating and plumbing services. The prospective partner would be responsible for all interior improvements in accordance with *The Secretary of Interiors Standards for Treatment of Historic Properties*.

Partnership: NPS will consider partnering with a non-profit for long-term adaptive re-use and management of this building. Criteria for potential partners include:

- Financially capable of funding interior rehabilitation to accommodate proposed adaptive re-use.
- A partner who places value on protection of historic, cultural, and natural resources.
- A partner who has an existing or historic connection with the community and/or Kennecott.
- Adaptive re-uses of the building must also allow some public access for interpretive purposes.

Of the three bunkhouses remaining in the mill town, the National Creek and East Bunkhouses are in poor condition and will be managed into the future with little or no interior access to the public. Only the West Bunkhouse retains a high level of integrity reflective of its historic past, both with respect to its exterior appearance and to its interior design, functionality, and spatial layout. Because of the high historic and interpretive value of the structure, NPS has classified the interior rooms of the building relative to potential adaptive re-use. The purpose is to give potential partners an indication of where adaptive re-use might be considered. NPS rated each interior portion of the building as primary or secondary space. Primary space indicates rooms or areas that have maintained the integrity of their character-defining elements and retain high interpretive value. In general, adaptive re-use of these areas is acceptable provided the proposed use is compatible with the historic use of the room and as long as the design and materials needed for restoration are reflective of the original structure. Areas identified as primary space have a high interpretive value and NPS (or its partner) will have access for interpretation purposes. The following rooms and/or areas of the West Bunkhouse were identified as primary spaces:

Ground floor: Locker room; wash-up/sink area; office; west staff bunk room; staff area corridor; back porch.

First floor: Entryway; west side dining hall; and Kitchen/Pantry area.

Second floor: Lounge area; bunkrooms 1, 2, and 3 on the east end; and the hallway/corridor.

Third floor: Head of the stairway and the hallway/corridor.

Interpretation: Open to the public after interior modification, in cooperation and consultation with prospective partner. After adaptive re-uses to support partnership have been determined, develop an interpretive panel for the interior that links the building, via text and images, to the historic use of the structure. Include interpretation of the Japanese cooks. Part of a self-guided walking tour and guided tour with concessioner.

New Schoolhouse

Stabilization: Restore classrooms after maintenance activity is removed from building. Install chalk boards, refinish floors.

Interpretation: Possible future classroom for visiting school groups and/or interpretive exhibit space. Part of self-guided walking tour. Acknowledge the location of the handball court/hockey rink in future interpretive material.

Small scale features: Re-establish cribwall/utilidor between New School and West Bunkhouse.

Recreation Hall

Stabilization: Cyclic maintenance. Install sprinkler system. ADA compliant hardening of walkways to outhouses.

Partnerships: Completed lease agreement with Wrangell Mountain Center to manage the building for community events, interpretive programs, and classroom purposes.

Interpretation: Opened to the public in 2003. Part of a self-guided walking tour. Two interpretive panels were installed in 2004.

Small scale features: Hose house was rehabilitated and will be utilized to provide storage for fire suppression supplies (backpack pumps or extinguishers).

Old Schoolhouse

Stabilization: Cyclic maintenance. Utilize boardwalk behind building to connect this building with the shuttle turnaround, thus providing a continuous visitor orientation space. Porch behind building would be extended and roofed. Benches installed to provide covered visitor space. Existing outhouse “expanded” to provide men’s and women’s vault toilets.

Interpretation: Convert the Blackburn School into a staffed, contact station offering backcountry information, orientation, and safety messages. Possible space dedicated to concessioner who offers guided tours through Kennecott NHL. Install interpretive panels that introduce each of the landmark’s themes and that interpret the Blackburn School building history. Update the Scope of Sales and develop displays for Alaska Geographic sales. Part of a self-guided walking tour. Possible future use as winter caretaker office.

Dairy Barn

Stabilization: Cyclic maintenance. Future use as shop/break room and this area will be utilized for employee parking. Enclosure for generator, construct material shed and security shed.

2.7.4 Residential A Zone

Vegetation: The following vegetation clearing will be done around all historic structures on NPS lands in this zone, for fire and windfall protection and for access to the buildings:

- Clear all spruce trees within 30’ of all structures.
- Clear all woody vegetation within 5’ of all structures.
- Limbing of spruce trees up to 50’ from the buildings. Consideration will be given to the effects on thinning/limbing on adjacent landowners and maintaining privacy/vegetation screening.

Elsewhere in this zone, selective thinning will occur in order to open views of the Kennicott Glacier and/or mill building. Specific locations include:

- Selectively clear mill building view sites on the Silk Stocking trail approaching the National Creek bridge.
- Selectively clear specific view positions along the historic wagon road on south side of National Creek to frame views of historic structures and glacier and mountains beyond. See description under Circulation and Access.

Encourage and/or allow vegetable and flower gardens present in 1938, including vegetable beds and flower boxes, based on historical documentation and precedent. Consider re-establishment of foundation plantings, and grass between cottages as reflective of the period. Invasive and high water demanding species will be avoided. Area will continue to be monitored for invasive plants and populations of such will be controlled and removed. Disturbed area revegetation would be considered as needed utilizing native herbaceous vegetation seed collected from the surrounding area.

Circulation/Access: The old wagon road from the Company Store through the landslide at the south slope of National Creek will be cleared and maintained for pedestrian use only. The landslide will be bypassed or a trail constructed through it

East Bunkhouse:

Stabilization: Re-siding and painting, with salvaged materials and new, “shadow” reconstruction of lower-level windows and doors (openings are framed but do not contain actual doors or windows). Replace roof and stabilize. Re-grading around building. This building is critical to maintain in place for National Creek stability.

Interpretation: Manage and interpret as a bunkhouse. Controlled access proposed. Part of a self-guided walking tour.

National Creek Bunkhouse:

Stabilization: Work to include interior reinforcement to help stabilize the structure, re-roofing to extend the life of the ruin structure. Manage as a ruin as part of the Kennecott streetscape.

Interpretation: Manage and interpret as a ruin. No interior access proposed. Part of a self-guided walking tour. Modify existing windows on the lower level so that visitors can see inside.

South Silk Stocking Cottage:

Stabilization: Cyclic maintenance.

Interpretation: Part of a self-guided walking tour, incorporating educational materials regarding respect for private property.

North Silk Stocking Cottage:

Stabilization: Cyclic maintenance. Remove sauna above cottage.

Interpretation: Part of a self-guided walking tour, incorporating educational materials regarding respect for private property.

2.7.5 Residential B Zone

Vegetation: The following vegetation clearing would be done around most historic structures on NPS lands in this zone, for fire and windfall protection and for building access:

- Clear all spruce trees within 30' of all structures.
- Clear all woody vegetation within 5' of all structures.
- Limbing of spruce trees up to 50' from the buildings. Consideration will be given to the effects on thinning/limbing on adjacent landowners and maintaining privacy/vegetation screening.

In cooperation with private landowners, clear woody vegetation along the rail corridor north of the Mill building to end-of-rail to reestablish conditions reflective of historic period and improve glacier views. Encourage and/or allow vegetable and flower gardens present in 1938, vegetable beds, flower boxes. Invasive and high water demanding species will be avoided. Area will continue to be monitored for invasive plants and populations of such will be removed. Disturbed area revegetation would be considered as needed utilizing native herbaceous vegetation seed collected from the surrounding area.

Circulation/Access: Maintain historic access routes for pedestrian and local vehicle use.

Kennecott Cottage 39C, Lot 88

What has been done: Previous owners did interior work. Interpretive panel installed. New roof installed.

Proposed Actions (structural): Work to include lead paint mitigation, re-establish trim and cabinetry details, repairs to interior paneling, floors and ceiling, new electrical wiring and lights, interior and exterior painting, doors and window repairs. Reconstruct outhouse and boardwalk in the back.

Interpretation: Opened to the public in 2006. One interpretive panel installed in 2007. Manage as an historic period residence and as part of a self-guided walking tour.

Vegetation: Re-establishment of historical vegetation - this may be a lawn and garden.

Kennecott Cottage 13C, Lot 80

What has been done: This cottage on the east side of the railroad bed, was acquired by NPS in 2005. Nothing has been done.

Proposed Actions (structural): Manage as ruin.

Interpretation: Manage and interpret as a ruin. No interior access proposed. Part of a self-guided walking tour.

Vegetation: Selective thinning that allows views of boardwalk, cottage, and railroad bed without allowing for entry to this unsafe area.

Kennecott Cottage 39B, Lot 87

What has been done: Acquired by NPS in 2011. Collapsed under snow load, winter 2012.

Proposed Actions (structural): Consolidate collapsed material and manage as ruin.

Interpretation: Part of a self-guided walking tour.

Vegetation: Clearing for fire protection as identified above.

2.7.6 Other

Jumbo Transfer Station

What has been done: 2008 work included volunteer effort for emergency foundation and roof repairs, improvements to stop animal access into the building.

Proposed Actions (structural): Future work to include reroofing, wall and floor repairs, structural repairs.

Jumbo Mine Aerial Tramway

What has been done: 2003 documentation.

Proposed Actions (structural): Stabilization of the NPS-owned lower portion of the tramway system. Stabilization to include replacement of deteriorated structural members on tram towers, capping of column members with metal to prevent further deterioration, and bracing and reaffixing missing connections.

Vegetation: Brush removal would occur around NPS owned towers. The portion of the tramway visible from the tram terminus will be brushed to that the tramway system is evident. This action is dependent on possible NPS acquisition of Lot 65 above the tram terminus.

Mudhole Smith cabin

What has been done: Vegetation clearing for fire protection.

Proposed Actions (structural): Replace sill logs, remove non-historic interior flooring, cap the chimney hole to prevent rain and snow from getting in, and maintain the roof and door window openings.

Interpretation: Interpretive site with exhibit regarding aviation history in the area.

Jumbo Mine/Root Glacier outhouse

A vault toilet would be installed near the junction of the Root Glacier trail and the Jumbo Mine trail. The intent is to take pressure off the more remote (and unserviceable) Jumbo Creek outhouse.

The existing Jumbo Creek outhouse will be re-built and re-located. The interior of the new outhouse will be constructed of materials that are easier to clean.

Cemetery

NPS would consider developing a map of the cemetery that would be part of a self-guided tour. Proposed activities at the cemetery include fence maintenance/reconstruction; brushing of native vegetation in order to define cemetery plots; and maintenance of grave markers. To date no invasive plants have been documented in the cemetery but it will continue to be monitored for them and if found, they will be removed. Non-invasive, non-native plants do grow in the cemetery and will not be removed as they may be a part of historic plantings. A cultural landscape report has been prepared for the cemetery which includes recommended treatments. These proposed actions are consistent with the cultural landscape report recommendations. The final cultural landscape report for the cemetery will be made available for public review and will be appended to this document.