

PROPOSED ACTION FOR MANAGEMENT OF KENNECOTT MINES NATIONAL HISTORIC LANDMARK

Introduction

This document describes the National Park Service (NPS) concepts, goals, and strategies for management of the Kennecott Mines National Historic Landmark (NHL), in Alaska's Wrangell-St. Elias National Park and Preserve (WRST). It has been created in close consultation with the locally affected communities of Kennecott and McCarthy, with the recognition that not only does the success of the Kennecott Mines NHL depend on the quality of relationships between NPS and its neighbors, but that the protection of the historic Kennecott site in 1998 was based on the premise of partnership.

In total, the Kennecott Mines National Historic Landmark encompasses 7,700 acres of public and private lands (See Figure 1). However, proposed management in this document is focused on NPS-owned portions of the mill town. Nevertheless, some components of management (such as access/transportation) affect the entire Kennecott/McCarthy area. Many Kennecott structures (both historic and non-historic) and lots are in private ownership; this plan is intended to address only NPS owned properties. Figure 2 (**FORMERLY FIG. 3**) shows NPS and privately owned lots within the mill town. Participation and inclusion of proposed actions by private property owners will be at the sole discretion of those owners.

This document is a revision to the 2001 Interim Operations Plan for the Kennecott National Historic Landmark (NHL), which was written to develop management strategies for the NPS when the National Park Service acquired the privately owned Kennecott Mines National Historic Landmark in June 1998. This acquisition was initially facilitated by the locally-based non-profit organization Friends of Kennicott, formed in 1988 by a diverse partnership representing local landowners, tourism, mining, conservation and historical preservation interests to conduct emergency stabilization of key structures such as the Mill Building. Friends of Kennicott actively worked with the local community and NPS to realize a shared vision for the future. Realizing the benefits public ownership would bring, Friends of Kennicott, the Conservation Fund, Kennecott Copper Corporation, and others began to lobby Congress for NPS acquisition of the Landmark. These efforts succeeded in 1998 with a federal appropriation specifically supporting a community based partnership concept for management. Much of the spirit and intent of the partnership management strategy was written into the 2001 Interim Operations Plan, but not necessarily followed.

The Kennecott site, mined for its copper in the early 1900s, is approximately 5 miles from where the McCarthy Road ends at the Kennicott River, and lies at the heart of WRST; the largest National Park in the U.S.A. Kennecott lies in a wildness containing some of North America's biggest and most rugged mountains and glaciers. WRST was created under the Alaska National Interest Lands Conservation Act of 1980, and is just one of multiple overlaying management agencies and designations affecting Kennecott. National to global designations include National Park, National Historic Landmark, and World Heritage Site.

In 1998 NPS acquired 2,839 acres, including much of the historic mill town, the subsurface rights to the mine, and the natural area surrounding a contemporary local community. With the acquisition, NPS assumed new responsibility for protecting the important elements of the historical, cultural and natural landscape. In addition to being a historic site of national significance, the NHL also includes natural areas easily accessible to visitors and is a gateway to the park's backcountry. Its cultural landscape reflects a mixture of historic mining era buildings and artifacts intermixed with the ongoing life of an Alaska bush community, members of which own land and businesses intermingled with NPS holdings at Kennecott and in the nearby area of the town of McCarthy. Additional management layers with the NHL include subdivision easements, covenants, and architectural control bodies. The National Park Service is one owner among many.

The 2001 Interim Operations Plan was intended to provide guidance for management of the NHL for a five-year period. The Interim Operations Plan needs to be revised for the following reasons:

- There are major projects on the horizon, including stabilization of the 14-story concentration mill, stabilization of the leaching plant, and construction/installation of a potable water/fire suppression system.
- Much has been accomplished at the NHL since 2001. A revision is a good opportunity to document the stabilization, preservation, and adaptive re-use of historic structures that has occurred.
- There has been discussion and concern within the Kennecott/McCarthy community regarding work that has been performed relative to the community vision that was presented in the Interim Operations Plan.
- The Interim Operation Plan called for development of a communication process and procedure for joint NPS/community review of proposed projects. This needs to be described and implemented.
- New issues have developed in light of changes in access to the NHL that have occurred since the Interim Operations Plan. There is a growing component of Off Road Vehicle use and easier access to the site with privately owned full-sized motor vehicles.

This NPS document, collaboratively designed to help guide the future management of the Kennecott Mines NHL and environs, exists for use and benefit of the NPS, local communities, and visitors. Contained within these pages are values and codes of conduct designed to help clearly illuminate the interconnectedness of the community and the park and to help maintain a check and balance system that keeps both engaged in an ongoing dialogue. Regardless of park staff or resident changes over time, this plan is also intended to provide a record of institutional knowledge and mutual agreement, with regard to the management of the Kennecott Mines NHL.

2. Management Concepts

The key concepts that will guide the management of the Kennecott NHL derive from two primary sources: 1) the set of documents that were produced at the time the NHL was created (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.

The four primary concepts that will guide all management of the NHL are:

1) What is to be maintained is the sense of a site abandoned but still haunted by past residents, a place that has not been sanitized. It is a place of discovery for the visitor, but one where investigation and inquiry can be done safely and with respect for the remaining historic objects and structures. (Excerpted from page 25 of “Kennecott Acquisition Past, Present and Future”).

2) NPS will view the management of the NHL to be a cooperative venture involving the National Park Service, local residents (both as individuals and as represented by the McCarthy Area Council), and local businesses and nonprofit organizations.

3) In accordance with ANILCA, management of the NHL will not interfere with subsistence activities by federally qualified subsistence users of the Wrangell-St. Elias National Park and Preserve.

4) In accordance with ANILCA, NPS will preferentially hire local residents to assist in managing and interpreting the NHL.

Furthermore, management of the NHL will continue to be governed by the following set of guidelines that: 1) emerged from more than a decade of public discussion preceding the acquisition of the NHL; 2) were put into writing by a local non-profit (Friends of Kennicott) and endorsed by the community in general at the time of acquisition; and 3) were incorporated into NPS’s 2001 Interim Operations Plan for the Kennecott National Historic Landmark (in the section titled Management Concepts):

In all management activities, we seek 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. How the “light touch” approach will be defined in relation to the Secretary of Interior’s Standards for Treatment of Historic Properties (see Appendix 1) will be determined by a cooperative process involving local residents and NPS.
- 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 all 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.

To ensure that the foundational documents from which these management concepts derive are known and understood by NPS personnel charged with significant responsibilities for planning management operations in the NHL, all such personnel will be required to:

- 1) receive training about ANILCA provided by the NPS;
- 2) read and study all relevant documents related to the history of acquisition and the development of management planning, including but not limited to: the Cultural Landscape report, the 1997 NPS report "Kennecott Acquisition Past, Present and Future", the 2001 Kennecott Interim Operations Plan, and the current management plan outlined in this document. These documents are available at the Friends of Kennicott webpage (<http://www.friendsofkennicott.org/documents.html>).

3. Specific Goals of NPS and the McCarthy/Kennecott Community for Management of the Kennecott National Historic Landmark

General Goal: The general goal for management of 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 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. However, before any activities are undertaken that exceed the guidelines for "Preservation" as outlined in the Secretary of Interior's Standards for Treatment of Historic Properties (see Appendix 1), an extensive process of consultation between NPS and the local community will first be undertaken to arrive at a joint decision to go beyond the level of preservation and stabilization. The level of treatment defined as "Reconstruction" (i.e., depicting, by means of new construction, the form, features and detailing of a non-surviving site, landscape, building, structure or object; see Appendix 1) will, to the greatest extent possible, be avoided as being incompatible with the key management concepts described above (in particular, maintaining the sense of a site abandoned and managing with a "light touch").

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 a partnership with this local community to manage the landmark in such a way as to maintain the character of the local communities of Kennecott and McCarthy.

NPS and the Kennecott/McCarthy Community define a partnership as an active cooperation between equals. Both partners recognize that each benefits from the other. For example, the NHL benefits from visitor services provided by local businesses, and local residents benefit from jobs, law enforcement, and emergency medical services provided by NPS.

However, NPS also recognizes that, as the largest single entity in the NHL, park management activities have the potential to have a much greater impact on local residents than the activities of those residents are likely to have on the NHL. NPS will not infringe on the property rights of individuals to conduct any legal activity they choose on their private land within the NHL. Moreover, on public land within the NHL, NPS will employ a gradient of management to minimize impacts of its activities on local residents. In areas of the NHL that are far from private land, where impacts on local residents are likely to be minimal, the management needs of the NPS will take precedence. But in public land that borders private land, the need to minimize impacts on private residents will take precedence over any other management concerns. The precise distance from private land at which the need to minimize impact on local residents will become the primary management concern will be determined through frequent interaction and communication between NPS and the community, as described in Section 4 of this Plan.

In the spirit of partnership, and in keeping with the injunction of ANILCA to favor local expertise, NPS will give preferential consideration to local entities (both businesses and non-profit organizations) whenever it makes available for adaptive reuse any space in Kennecott structures.

Local Hire and Participation in Public Meetings by Local Staff

WRST was established by the Alaska National Interest Lands Conservation Act (ANILCA) of 1980. 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 procedures.

Through Section 13 of ANILCA, Congress recognized, through local hiring preference, the value of local knowledge and expertise. To fulfill the NPS mission “to conserve the natural and historic objects and wildlife therein to keep them unimpaired for enjoyment of future generations”, there must be people on staff able to interpret the natural and cultural resources of the area, and who care about their long-term management. ANILCA acknowledges that local people already have the special knowledge and expertise of the natural and cultural resources, and have a vested, long-term interest in their good stewardship. Local community members are an asset to fulfill the core NPS mission.

The success of the Kennecott NHL depends on maintaining a high-quality relationship between NPS and its neighbors. NPS welcoming local residents as part of its staff and local residents welcoming NPS as part of the local community are critical to both the healthy and harmonious management of the KHL and the continued wellbeing of the local community.

Given the unusually large amount of private property and the living communities within WRST, many visitors ask about the local community. NPS interpreters are therefore often seen by visitors as representing not only the NPS, but the local community as well. It is important that the story of the local community be told accurately, and therefore be told by people who are actually a long-term part of that community.

Hiring Procedure

To the maximum extent allowed by law, NPS will always first endeavor to fill a staff position in the NHL with a qualified local resident, by beginning with a local competition. If a qualified person does not arise in that competition, the search may then be opened up to a broader national pool. National competitions, in USA Jobs for example, should include as part of the scoring criteria local, regional and state level knowledge. The local community recognizes that positions which require a great deal of specialized training, such as a Law Enforcement Ranger, are unlikely be able to be filled locally.

Civic Engagement by Park Employees

WRST recognizes that many of its employees in the NHL are also local residents (indeed, both the spirit of partnership and the ANILCA-specified preference for local hire ensure that this will be the case). Therefore WRST will protect the First Amendment rights of its local employees to speak as individuals, and encourages and supports its employees (including local hires) to participate in the public process. Local residents value sound park employment opportunities in the community, and both the park and local community recognize that allegiances to both the local community and the NPS can coexist, and that it is mutually beneficial to cultivate those joint allegiances.

WRST will develop a policy for employees that allows for appropriate participation in local public meetings. The McCarthy Area Council (MAC) subcommittee that reviewed this plan suggested the following policy, which WRST will consider in developing a formal policy:

- 1) NPS employees who are local residents should be encouraged to participate in MAC and public park management planning meetings during work hours, if doing so does not conflict with their park duties and if they have obtained advance permission from their supervisors, but they will not expect to be paid for their attendance;
- 2) NPS employees, particularly local residents, should demonstrate respect for their supervisors and employer (WRST) by showing awareness about what is intended to be internal NPS information and what is public information. NPS employees should be encouraged to speak their minds honestly at public meetings, with the understanding that it will be done with a good faith effort to be polite and respectful of their employer and park management. Employees will also make clear when speaking or presenting at a public meeting if they are doing so as a park employee or as private citizen, whether they are in uniform or are attending the meeting as a park employee. If employees are attending a public meeting as paid park staff, but would like to take a short time to express their own personal view, they should request clearance to do so from their supervisor in advance of the meeting.

Management of Cultural Resources

A. 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 Secretary of Interior’s Standards for Treatment of Historic Properties. Other historic buildings may be preserved or managed as ruins.

B. 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.

C. Small-Scale Features: To preserve the character of the landscape and to enhance the interpretive environment, consideration will be given to preserving 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). In general, reestablishment or reconstruction of small-scale features will be prohibited as being in conflict with the primary management concepts articulated in Section 2 of this document. However, in rare cases, reestablishment or reconstruction of particularly iconic features may be considered, but only after ample opportunity for consideration of proposed plans has been provided to, and approval obtained from, the local community, and only when the activity can be based on clear historical documentation provided well in advance to the public.

D. 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.

Management of Natural Resources

A. Vegetation: Existing vegetation throughout the mill town is largely the result of growth since the historic period. Limited, selective thinning of vegetation will 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 the WRST Park Biologist will be charged with monitoring. On an annual basis, the Biologist will report the results of these monitoring activities to the local community (e.g., by appearing at a public planning meeting or a meeting of the McCarthy Area Council). Any adverse impacts of management activities on rare plant (or animal) populations will trigger immediate cessation of those activities until less adverse approaches can be identified and implemented.

Exotic vegetation that causes damage to or threatens other resources will be removed whenever feasible. Revegetation of disturbed areas resulting from NPS activities will utilize native seeds/cuttings from local (i.e., within WRST) population sources.

B. Wildlife: The NHL provides habitat for numerous wildlife species. NPS will protect wildlife habitat and work to prevent negative wildlife/human interactions, while recognizing that wildlife is a resource for local subsistence use.

C. Water Resources: In addition to representing unique ecosystems supporting animal and plant species not present elsewhere in the NHL, local clear-water streams provide water for the community as well as for NPS operations. NPS will take all necessary actions to maintain 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.

D. 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.

Interpretation

NPS is currently developing an interpretive plan for the NHL based in part on a three day exhibits workshop held in Kennecott in June, 2011. Based on the result of that workshop, there may be minor changes to the goals and proposals for interpretation described below. **NEEDS UPDATING.**

Interpretive programs 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. Interpretation 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.

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 accommodate landowner use of subdivision easements and motorized use for access to subsistence resources.

Subsistence Harvest

The National Park Service and the Kennecott McCarthy Community strongly support the valid existing rights of subsistence harvest by local rural residents. The preservation of historical and cultural resources must work in concert with and will not take precedence over the right to pursue subsistence activities as described in title 8 of ANILCA and codified in CFR.

Administration and Operations

A. NPS Utilities and Infrastructure: The goal is to support structural stabilization 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 or local community.

B. 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.

4. 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 business provide essential visitor services and contribute to the rich hospitality experienced by park visitors, NPS will prioritize establishing frequent, on-going communication with the local Kennecott/McCarthy community.

The Fridays before Memorial Day and Labor Day will be established as dates for general Park Service meetings 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 (emphasizing what did and did not follow the plans presented at the spring meeting, and analyzing why any discrepancies occurred) and expectations for the following year. These meetings will be intended to be brief and primarily informative, encouraging maximum participation. However, they will be supplemented with a series of additional in-depth meetings held in Kennecott/McCarthy during summer months (June through August) and targeted at particular issues of concern (e.g., potential impact of a Kennecott water system on Bonanza Creek and residents living along it, methods for noise abatement, alternative energy sources for Kennecott, preservation plans for particular structures, etc.). WRST staff will specifically invite to these targeted meetings those local residents most likely to be affected by the particular issue to be considered (e.g., residents along Bonanza Creek for a meeting about the water system). The expectation of NPS and the community is that serious community objections or concerns will be addressed in these issue-specific meetings, and that decisions about how to proceed on a particular issue will be made by consensus between NPS and representatives of the local community.

Once every five years, WRST will initiate a review of the Kennecott Operations Plan, seeking full community input well in advance of adopting any revisions to the current plan.

The Park will institute a rigid protocol for informing the community with at least two-week 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.

5. Architectural Control Committee (ACC)

The Architectural Control Committee (ACC) was created in 1976 by the Great Kennecott Land Company to oversee neighborhood covenants in the Millsite Subdivision that are intended to keep the historic feeling of Kennecott intact. The details of how this is done are in the ACC's defining document. This document can be revised every 10 years by vote of the landowners. The ACC board will be made up of park employees and private land owners, with equal representation of the two. The Park recognizes that the local residents are committed to keeping Kennecott a combination of historic ghost town and living community and take a personal interest in being good stewards of the land and the artifacts alike, and views Millsite residents as trusted partners in meeting the goals of the ACC. This local commitment has been demonstrated by 22 years of pre-park stewardship and oversight of the ACC, and by the fact that no one has attempted to undermine the intent of the original ACC document in the 34 years of its existence.

The voting procedure for changes to the covenants will be examined. Currently, there is one vote per lot in the millsite subdivision, and changes are made by a simple majority. As NPS owns a near majority of the lots and continues to acquire more, they soon will be the majority vote. Discussion will continue on what a more equitable method would be to ensure that Kennecott remains a place where it is possible to maintain a year round sustainable life where locals are able to grow, raise, or wild-harvest food, access clean water, and experience minimal impact from the park presence forever. These are customary and traditional activities that ANILCA promises to the private land owners. The NPS recognizes that it is important they give locals a stronger voice in the ACC so they can protect these rights. If the September 2011 date for possible revision of the covenants is missed, this issue will be resolved by September 2021.

To give some history, when NPS purchased lands from the Great Kennecott Land Company, they required that a position be added on the board so that they would always have the majority voice. Many other properties were already privately owned, however, and this addition of a committee member was done without any vote or discussion. Thus, it cannot be considered a legal addition and will now be dropped. Currently, the board consists of three park employees and two local residents. This does not give a strong voice to residents and the problem will be fixed by either adding another local voice or dropping a park employee, so that there is an equal number of private and NPS positions on the board.

The main concern for locals is protecting themselves from the well demonstrated past tendency for NPS in other parks to push inholdings out by making it impossible for residents to meet their basic needs. Current NPS administration is not moving in this direction, but they recognize that it is important they give local residents a stronger voice so they can protect themselves from these potential problems in the future.

6. Zone by Zone Proposals

This section covers specific proposals regarding management of buildings and structures within the NHL, Transportation/Access issues, NPS Utilities and Infrastructure, Visitor and Resource Protection, and Other.

Buildings and Structures

Detailed NPS proposals for how each of the buildings and structures within the NHL are presented in Appendix 2. However, these are to be viewed by all interested parties (in particular, by NPS and the local community) as preliminary proposals to be fully vetted in park/community discussions before being put into effect.

Before park-community discussions focusing on how to treat individual structures are conducted, a series of meetings beginning in May 2012 will first focus on the general question of how managing with a “light touch”, as articulated in the Management Concepts section of this report, is to be interpreted in light of the Secretary of Interior’s Standards for Treatment of Historic Properties (see Appendix 1). Once this translation has been agreed upon by both NPS and the local community, it will be consistently applied in all decisions about how to treat individual structures into the future. Once established, any changes to that understanding will be made only will full discussion and buy-in from both management partners (i.e., NPS and the local community).

WRST must often request funding for management activities several years before the work is to be performed, and often before the processes of designing a detailed management plan and presenting it for community consideration and approval have been completed. Nevertheless, the awarding of funding will never be used to justify proceeding with preservation or management activities in the absence of community input and support. If a funded project is later judged by NPS and the community to be incompatible with the management concepts in Section 2 of this plan, the funding will be returned unused to the funding agency.

Transportation/Access

Kennecott Arrival/Orientation

The park will hold a series of public meetings starting in summer 2012 to discuss the arrival and orientation of visitors to Kennecott. Issues that need to be addressed include:

- greeting visitors in Kennecott
- providing visitors with a basic orientation to Kennecott
- making visitors aware of private property within the KNHL
- what to do with the “shuttle turnaround” area
- amenities to be provided (outhouses, benches, shelters, bike racks, etc.)
- location, content and quantity of any orientation signage or literature
- needs of the local business that operate the shuttle service that most visitors use to get to Kennecott (including the need for a location to sell tickets and to monitor the number of users waiting for the shuttle)

Motor Vehicle Use Within the NHL

The rights-of-way within the NHL are governed by the Kennecott subdivision plat that was established 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. As a newer neighbor of the local residents within the subdivision, NPS recognizes that it is also 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”, and not the public in general. The majority of the landowners in Kennecott have requested of WRST that, as the rights-of-way cross their private land, their property rights as specified by the plat be respected. They have also raised with WRST liability concerns regarding use of motorized vehicles by the general public on the Kennecott rights-of-way, as those vehicles pose a significant hazard to pedestrians on steep and narrow roads with reduced visibility. The residents have specifically requested that the park notify non-local visitors to the NHL that they are welcome to use the rights-of-way on foot or bicycle, but that ATV, motorcycle, and motor vehicle use by the general public within the subdivision is not allowed. As the residents of the subdivision have made clear to all local residents within the greater McCarthy/Kennecott area that they are guests of the subdivision residents, this restriction against motor vehicle use with the NHL does not apply to those area residents.

Therefore, to respect the private property rights of the residents of the Kennecott subdivision, NPS will:

- Post signs and circulate brochures notifying members of the general public (not including residents of the McCarthy/Kennecott region) that they are welcome to use the rights-of-way on foot or bicycle, and to come to Kennecott on the shuttle vans, but that no visitor ATV’s, motorcycles, or other motorized vehicles are allowed in Kennecott. This restriction will in no way be seen to limit the rights of local residents within the NHL and residents of the greater McCarthy/Kennecott community (as guests of the NHL residents) to use their motor vehicles on the rights-of-way within in the NHL.
- Notify ATV user groups throughout Alaska of the restriction of ORV use in the NHL
- In conjunction with local businesses, provide adequate parking for the motor vehicles of non-local visitors outside the NHL.

Subsistence ORV use: The use of Off-Road vehicles by federally qualified subsistence users in the area is authorized by 43 CFR 13.46, 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, but the covenants established by the Great Kennecott Land Company specify that residents have the right to park their private vehicles along the rights-of-way. In consultation with the local

community, the park will develop, by October 1, 2012, a parking policy for residents, NPS employees, and visitors in the NHL. In particular:

- NPS will develop a Memorandum of Understanding (MOU) with NHL landowners to manage vehicle access and parking.
- Vehicle parking in the NHL will be in designated, limited areas, some specified for day use only.
- Exceptions will be made for ADA access and for subsistence purposes.
- Plans will be developed to avoid parking overflows during events in the Recreation Hall.
- 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.
- Remote access landowners should have a courtesy parking area within the NHL
- In support of NPS commitment to reduce vehicular traffic in the NHL, NPS will encourage contracted employees, regardless of residency, to use the shuttle to travel to and from the worksite. Contracted employees will be prohibited from driving their personal vehicles while performing work duties for the NPS, and as much as possible, construction equipment and vehicles will be left onsite and not used as commuter transportation.
- NPS will establish a parking area for employees and contractors near the Dairy Barn and encourage its use by those individuals.
- 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 (also see the section on Off Road Vehicle Use)

Roads

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. Between McCarthy and Kennecott, a cooperative agreement would be sought with NHL landowners and businesses to address NHL road maintenance and another cooperative agreement would be sought with the State and local landowners to address road maintenance outside of the NHL.

Wagon Road: NPS would consider developing a map and possible interpretive opportunity at the cemetery. This would be part of a self-guided walking tour. Proposed NPS activities at the cemetery include fence maintenance/reconstruction, brushing of vegetation, and maintenance of some grave markers.

Silk Stocking Loop: Although Silk Stocking Row is the site of several historic structures, it is also a heavily residential area (for both NPS staff living in the cottages and for local residents

with homes along the Row). Therefore, NPS will not promote self-guided tours or interpretive exhibits on Silk Stocking Row south of National Creek. As outlined in the NPS Interpretive Concept Summary (July 17, 2011), exterior signs, such as would be used in a static interpretive overlook exhibit, will be avoided in this zone. As an alternative, the park will encourage foot traffic on the National Creek loop, from the GMO over the footbridge to the historic trail leading to National Creek above the general store.

Trails and Glacier Access

Kenecott is not just a historic site; one of the most common and important activities undertaken by visitors to Kenecott is use of the hiking trails that provide access to surrounding frontcountry and backcountry, including the heavily visited Root and Kennicott Glaciers. Indeed, two of the most popular hiking trails in the entire park are included, in their entirety, within the boundaries of the Kenecott 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 this plan.

This section addresses trails which provide access to the surrounding frontcountry and backcountry from the Kenecott 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 pedestrian-oriented “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 Kenecott townsite are discussed elsewhere in this document (see proposals listed under “Circulation and Access” for the Industrial, Administrative Core, and Residential A zones in Appendix 2), but we note here that these shorter trails work in concert with frontcountry/backcountry trails to promote and preserve an explicitly 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 wilderness 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 frontcountry 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 3½ mile pedestrian trail to the National Historic Landmark 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. Near the south end, a trail segment that links with the proposed walk-in campground (see description below) would also be included. The trail will be constructed and maintained exclusively for non-motorized use, with a tread approximately 2 feet in width constructed of existing moraine material, and with minimal alterations of grade as necessary only to ensure safety and that water will move off the trail.

Walk-In Campground

A 2002 Environmental Assessment and Finding of No Significant Impact proposed and evaluated effects of a walk-in campground in the Kennicott Valley. NPS is still committed to the concept, which would designate 42 acres of land east of the Kennicott River for primitive tent camping. The site under consideration is one mile northeast of McCarthy and 0.35 mile from McCarthy Airport. Public input will be solicited prior to final determination of the detailed site location in order to minimize impacts on valued resources (water supplies, swimming areas, popular recreational sites, etc.)

Campground facility development and amenities would include drinking water, vault toilets, bear-resistant trash receptacles, bear-resistant food storage boxes, and a centralized food storage area. Camper food storage, food preparation, and food consumption would be restricted to the centralized area and prohibited at individual campsites. Access to the campground would be limited to non-motorized methods, including the trail described above and public rights-of-way from the Kennecott-McCarthy Road and/or the Wagon Trail. NPS rangers would regularly patrol the campground to ensure compliance with food storage, non-motorized access, and other regulations.

However, before a campground is approved in the proposed location, potential human-bear conflicts will be given full consideration. In particular, this area harbors an abundance of soapberry (*Shepherdia canadensis*) bushes on which bears feed heavily in July and August, and the bears depend on this food resource to prepare for their winter hibernation. If careful consideration leads to the conclusion that human presence would negatively impact the bears, the campground will either be relocated or closed to campers during the period when bears are feeding in the area.

NPS Utilities and Infrastructure

Mill Site Water System (this system was proposed, analyzed, and presented in public meetings in the 2006 Kennecott Mines Support Facility Plan/EA). See Figure 4.

The park understands that participation in the 2006 Kennecott Mines Support Facility Plan/EA was minimal due to lack of communication, including a failure to announce the meetings, summarize the importance of the meetings, and reach out to key stakeholders that would be directly affected by the proposed plan. The community understands that participation in the planning process is necessary and crucial, including attending the meetings, reading the proposed plans and submitting constructive commentary in writing. The park and community agree to

work hard to correct these previous errors so that management of Kennecott can move towards a common vision.

The park also has significantly more information now than it did in 2006, which enables it to discuss these projects more thoroughly and precisely. Examples of relevant information include the Bonanza Creek hydrology study and Steve Petersen's research on water tanks and fire suppression systems.

Understanding the goal is essential to identifying and planning the steps to achieve it. To this end, the park will supply the community with data, studies, plans and vision statements regarding the predicted needs that will be met with these utility and infrastructure systems. This might include projected NPS staffing needs, construction needs, fire modeling, visitation, visitor services, projected water and power usage, and any other information on the park's vision for the future.

Considering the scope of this plan and these projects, the park will hold a series of public meetings, which will be divided into manageable categories – first by geographic area and second by delimited topics. As of the writing of this plan, meetings scheduled to address the topics covered in the NPS Utilities and Infrastructure section are as follows:

Water and Sewage Systems in Kennecott (including Gathering, Treating, Storage, Distribution and Fire Safety) - ____ *date* ____

Power in Kennecott (including Generation, Distribution, Noise and Alternative Energy Sources) - ____ *date* ____

West Side Development (including building housing and storage) - ____ *date* ____

Airport Office (including power generation and other utilities) - ____ *date* ____

Specific dates above to be filled in for the final Plan, and perhaps other issue-specific meetings added to the list (with dates)

Each meeting will be open to the public, but NPS will specifically invite key stakeholders (e.g., nearby landowners, pilots that use the airport almost daily, etc) to participate. Information on each subject/project will be made public (by mail or internet) at least two week prior to the meetings so that participants can consider the topic and do appropriate research. A pre-meeting walk-through at the proposed job site will be lead by NPS staff to increase community understanding and buy-in.

All parties understand that having public meetings about specific projects is the best way to get interested parties involved, and create a finite agenda which everyone can understand, research, give input, and then work towards creating a common, practical vision which will be essential for a partnership between the park and community.

Water Gathering and Storage.

A water intake structure has been planned to be constructed on Bonanza Creek. Historically, water intakes were constructed at an elevation of 2350 feet on Bonanza and National creeks. The water was used for milling operations, power generation, fire protection, and drinking water. The following elements have been proposed by NPS:

A water intake structure is proposed to be constructed at or below the historic intake (currently in private ownership) on Bonanza Creek at an elevation of about 2,350 feet. To construct the intake, the side of the stream bed would be excavated and concrete intakes about 6 feet by 6 feet by 6 feet would be constructed and installed nearly flush with the ground surface. NPS would work closely with residents and landowners downstream of the construction area to minimize the impact on the water supply and water intakes of downstream residents. NPS would also minimize the sound, traffic and other disturbances associated with construction. The area of construction would be backfilled and restored.

A water storage tank with a capacity of approximately 120,000 gallons is proposed to be constructed at an elevation of about 2270 feet. A smaller, potable water treatment tank with a capacity of about 5,000 gallons is also proposed to be constructed in the vicinity of the larger water storage tank. These tanks should not be seen from the road or Kennecott town site. The project would require vegetation to be cleared and a level gravel terrace would be graded in an area of about 0.5 acres. About 2200-2600 lineal feet of 10-inch diameter hydroelectric waterline between the Bonanza Creek intake and the storage tank would be constructed. This would include 1000-1300 feet from the intake to Bonanza Road that would be cleared and graded. A water pipeline would be constructed either on grade, or buried at a depth of 4-6 feet. A pathway for construction equipment and line maintenance would be constructed along the pipeline. The details of this project would be determined through a cooperative effort with community members as outlined below.

Regarding the proposed plans on Water Gathering and Storage, the park will hold a public meeting on the specifics of this section of the plan. There is concern that this proposed plan is in violation of the Bonanza Subdivision Covenants. Other concerns are: 1) potential effects of diversion of water from the creek on plants and animals who depend on the unique clear-water ecosystem provided by the stream; 2) impacts of construction on wildlife (e.g., bears and moose) that regularly travel along the Bonanza road corridor; 3) the possibility that a permanently cleared access road along the water line will become a trail for hikers that will bring them into close proximity to private land; and 4) the temporary noise impact of construction on local residents and the permanent visual impact of the water intake, the water line corridor, and the water tanks.

Therefore, these concerns will be fully vetted in a series of public meetings aimed at seeking consensus for how to proceed before any construction is begun. These meetings will center on

discussion of the options available for Water Gathering and Storage, and will include key individuals from the park (including but not limited to the Chief Architect (Steve Peterson at the time of this plan) and Head of Maintenance (Wayne Chalomar at the time of this plan)), as well as key individuals from the community (including, but not limited to, the landowners and residents along the Bonanza Road (Dan Doak and Alexandra Rose, Larry Hoare and Rita Pfenniger??, Mike Monroe, Jason and Joey Geck, Sam & Kris Gregory, Charlie O’Neil and Lyn Plomaritis, Diane Malik and Orion Brewster, and Tim Mischel). Park personnel will distribute relevant data to community members at least two weeks prior to the meeting, including study findings on Bonanza Creek hydrology, projected water needs for NPS staff and visitors to Kennecott for the next decade, potential locations for water tanks clearly marked on maps, options and considerations for sizing of water tanks, sketches or pictures of proposed water tanks, and any other relevant data so that community members can consider the project, do their own research, and give valuable, constructive input. Items to be discussed will include: the exact potential locations of the intake, waterline, tanks, etc. that the park has considered (including potential National Creek sites); equipment that will be used on this project; road improvements on Bonanza for equipment; proposed timeframe for the project; ways in which the park intends to minimize impacts to residents (water flow and quality, construction noise, etc.); size and shape of water tanks; visual impacts of tanks and cleared vegetation; specifics of burying waterline or constructing on grade; size of pathway for construction and maintenance; projected schedule of maintenance; specific ways to minimize impact of maintenance, including traffic on Bonanza Road.

If this process cannot be completed before any awarded funding for the project expires, the funding will be returned unused to the funding agency.

Water Treatment

A potable water treatment facility would be constructed at either the Transformer House or the Power Plant. Facility design to assure compatibility with the historic fabric would be provided. Facility design will also assure silent operation (i.e. that no sound will be heard outside the building while facility is operating). Water treatment issues would be discussed at the “Water and Sewage Systems in Kennecott” meeting listed above.

Potable Water Distribution Lines

A treated potable water line would be constructed in parallel with a fire flow distribution line in the historic railroad alleyway of the Mill Town. The piping would run together in buried or reconstructed above-ground wood utilidors. About 2800-3600 lineal feet of potable water pipeline would be required; if buried, the line would be 1-2 feet deep. Burying the line is preferred, and any utility corridor will be constructed to facilitate use by Kennecott residents as well as NPS, so as to avoid any potential future concerns or complications of residents’ utilities being visible in the historic site. Trenching and excavation in the alleyway would have to

proceed in a way to avoid damage to buried archeological features such as railroad ties, piping, and utilidors.

Water service will come to the Dairy Barn, Old School, New School, West Bunkhouse, Store, Machine Shop, and Power Plant over time. A public access spigot will be installed at the park's visitor center (Store), near the lower road, so that residents and visitors can fill water bottles and portable tanks but not cause congestion on the main street of Kennecott. Potable water distribution lines and connections and fittings will be buried.

Fire Suppression (covered in 2006 Kennecott Mines Support Facility Plan). See Figure 4.

The proposed fire suppression system would consist of underground piping with installed hydrants, water suppression/sprinkler system at some buildings. A mini-pumper fire emergency response vehicle is anticipated. Specifically, as recommended in the 2005 Value Analysis, water suppression systems, such as wet/dry sprinkler system and foam deluge systems would be installed in some of the buildings including the Mill Building, Power Plant, Machine Shop, Leaching Plant, Company Store and Recreation Hall. The West Bunkhouse would be connected to the water supply for installation of fire suppression by any potential future partner. The park will see to it that any fire suppression system installed will be as discreet and non-obvious as possible, including piping, sprinklers, hoses, hydrants and any emergency response vehicles or support buildings. As stated in the original Kennecott operation plan, what is to be maintained is the sense of a site abandoned but still haunted by past residents, a place that has not been sanitized. All parties acknowledge this valuable aspect of Kennecott, and will work hard to maintain the sense of the site by not modernizing the look or feel of Kennecott with visible contemporary fixtures, modern buildings or new equipment.

A foam deluge system may be used at the Mill because of its unique construction and sheer size. At this date, computer modeling of fire behavior has been completed for the Mill, Power Plant, Machine Shop and the Leaching Plant. The computer model has provided data for the design of the water utility system. The park will share this information with the community, as well as any other relevant data on the fire system in a public meeting specifically to seek input on Water and Sewage Systems in Kennecott so that we can all work cooperatively to move towards a shared vision. Park personnel will distribute relevant data to community members at least two weeks prior to the meeting, including available types of systems, detailed plans of the proposed system, costs and benefits, and how the system will appear once installed (water gathering and storage information is covered above but will also be supplied at that time). This meeting will be held prior to construction, with a lead time that will allow for alterations to the construction plans if necessary.

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 would be achieved primarily by septic systems (septic tanks and leach fields).

The buildings that would be equipped with sewer service are the Dairy Barn, Old School, New School, West Bunkhouse, Store, Machine Shop, and Power Plant.

The existing ADEC approved septic system and leach field has been expanded to service 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. The park will supply information to the community on what this construction entails and the timeline for completion at the fall NPS update meeting the year before construction, as well as at the spring meeting informing the community on NPS activities on the year of construction.

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 in to account expansion of the system and use of alternate sources of power generation including hydro and solar power at Kennecott NHL. The plan will be made available for review by NHL landowners and other interested parties by May 2013.

The generator located south of the Dairy Barn will continue to provide power for NPS operations at Kennecott as other alternatives are considered. NPS is committed to using state-of-the-art equipment to minimize or eradicate any noise from the generator. The goal of quiet operation is to be achieved by September 2012. The specifics will be determined by NPS, but options include moving the generator away from residents and visitor areas, constructing a sound-proof enclosure around the generator connex, state-of-the-art exhaust systems, and venting the exhaust into an underground chamber. Any noise or venting should be directed away from residential and visitor areas, but again, the goal is to have no noticeable noise from the generator in any direction. It is also imperative that mobile power generation for construction purposes be state-of-the-art equipment with minimal noise output, and that any portable generator should be utilized in the most efficient way possible so as to minimize the time of use, then be turned off when not in use.

The 2006 Kennecott Mines Support Facility Plan proposed hydroelectric power utilizing water out of Bonanza Creek, a Pelton wheel housed in the Power Plant, power generation equipment,

and batteries. The potential for utilizing hydroelectric power at the site is still being considered but a specific proposal will not be analyzed in this planning effort. In 2011, a five year water monitoring effort on Bonanza Creek will be completed. The data has been gathered to help determine the feasibility of hydroelectric power. NPS will continue to assess this idea as well as the potential to supplement generator power with alternative energy sources. Any hydroelectric project must not affect the flow, clarity or purity of the source creek, as these creeks are essential water sources for local residents. The location of intakes must also take into consideration and not impact local residents. It is essential that NPS seek community input before installing any hydroelectric systems, especially from residents that live along the creek or utilize that creek as a water source.

Solar power options will also be researched. The cost, feasibility and benefits of a solar power system that blanketed the glacial moraine area west/southwest of the Dairy Barn will be considered and thoroughly researched. This information will include a breakdown of costs and the total hours of generator time that would be reduced/saved with the system installed (i.e. how many hours will the generator run with an alternative system versus without an alternative system).

The NPS will conduct thorough research on the benefits and costs (financial, environmental, etc.) of alternative energy sources, including but not limited to solar power and hydroelectric systems described above. The goal of such a system would be provide power for 100% of daily operations, minimizing or eliminating the generator noise in Kennecott. To that end, the NPS will also research and implement ways to minimize electrical use in Kennecott. This information will be gathered and presented to the community by May 2013, with the goal to be assessing Kennecott's future electrical needs and meeting those needs with minimal impact to residents or the visitor experience. Community input will be sought during the summer of 2013, and a firm written plan for the future power generation of Kennecott should be complete by May 2014. The plan should be executed by September 2016.

West Side Development

Proposed development for the West Side was discussed in the 2006 Kennecott Mines Support Facility Plan. Work yet to be completed includes construction of a material storage building, construction of three single family houses, and construction of additional cabanas. NPS still intends to construct the proposed housing, storage building, and cabanas, as funding becomes available. NPS will directly engage surrounding residents and landowners, as well as the community at large, as West Side construction projects become potentially possible, so that public input can be sought and a shared vision can be reached – a common goal which minimizes impact on residents, landowners and the visitor experience while meeting the needs of the park.

NPS is committed to being an integral part of the community, and will make every effort to ensure that the West Side Development will not become an enclave of park employees,

segregated from the community. The NPS will encourage employees to utilize housing available in the community, and will make efforts to rent housing throughout the community for its employees when possible. This will increase interactions between park employees and community members, facilitating the partnership in invaluable ways. NPS will consider moving more administrative tasks and working staff to the West Side Development, which could reduce traffic and infrastructure in the historic townsite. NPS will run a shuttle for employees (permanent, temporary or contract) that live on the West Side but work in Kennecott, so as to minimize park vehicle traffic.

Airport Office

Installation of a co-gen unit to supplement existing power generation and provide heating capabilities will occur in 2011. The 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.

Solid Waste Management

NPS supports working with the community to deal with solid waste issues, by supporting a recycling program, and acquiring a trash compactor at the west side development to reduce number of back-haul trips to the landfill. Bear proof garbage containers will be installed in Kennecott and the kiosk on the west side to facilitate increased visitation and increased park staff. Bear proof recycling containers will be installed beside each bear proof garbage container, and NPS will sort/dispose of these recyclables appropriately. By promoting recycling, NPS will simultaneously promote education about responsible use of limited resources and burnish its reputation as a steward of the nation's natural heritage. Bear proof garbage containers will be installed at the West Side Development to allow capacity for emergency crews and situations, such as the Chakina fire. NPS supports the development of a privately owned solid waste transfer facility and would consider utilizing such a facility if economically viable.

Visitor and Resource Protection

Emergency Medical Service

The NPS would 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 would 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 would seek a cooperative agreement with the KMVFD that would address agency cooperation related to EMS and firefighting response. The NPS would continue to coordinate emergency response training and encourage participation by all interested parties. All EMS functions performed by the NPS would 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 would 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 would continue to provide SAR training to staff and area volunteers. NPS would operate within the Incident Command System. The NPS would improve radio communication with other agencies, such as the KMVFD and AK State Troopers.

Fire Response

Structural fire response within the NHL would be accomplished primarily through the proposed mechanical fire suppression described on page 27. Protection of structures from wildland fire would 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 would work closely with KMVFD and State of AK Division of Forestry to develop appropriate fire response strategies. The NPS would continue to issue Fire Fuels Reduction Permits to land owners adjacent to NPS-managed lands. The NPS supports the development and implementation of **DNR’s** Community Wildland Fire Protection Plan. The NPS prohibits fires on NPS lands within the millsite, 36CFR13.1906. Fire extinguishers are maintained in all NPS properties.

According to the National Fire Protection Association, 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. Hiring a winter caretaker would be considered to provide overall site security.

Bear-Human Conflict Management

The NPS would 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 would actively manage bear behavior if the animal poses a threat to human safety. The NPS would impose emergency closures when necessary to protect human safety.

Law Enforcement

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

Appendix 1. Applicable Laws, Regulations, and Policies

This section is necessary to provide information on the legal/policy sideboards under which NPS operates. This is not an all-inclusive list, but includes the laws, regulations, and policies most relevant to the management of a National Historic Landmark.

Alaska National Interest Lands Conservation Act (ANILCA) of 1980: This is the act of the U.S. Congress that created the Wrangell-St. Elias National Park and Preserve (WRST) in which the Kennecott Mines National Historic Landmark is located. In addition to specifying that WRST is intended to support both tourist visitation and subsistence activities, ANILCA also includes 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 procedures.

Kennecott National Historic Landmark: Kennecott was listed on the National Register of Historic Places (NRHP) in 1978 and became a National Historic Landmark in 1986. Kennecott Mines National Historic Landmark is nationally significant under National Register Criterion A as physically representative of early copper mining in Alaska and under Criterion C for engineering as this is the world’s first ammonia-leaching plant. The period of significance spans from the first claims in 1900 to the closure of the operation in 1938. If the need arises, the park has the ability to recognize and preserve structures and features outside of the period of significance.

National Historic Preservation Act of 1966 (NHPA) as amended: NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties and mitigate or minimize any adverse impacts. “Undertaking” is defined as a project, activity or program, funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with federal financial assistance; and those requiring a federal permit, license, or approval. Under the law, federal agencies must consult with the State Historic Preservation Officers (SHPOs) and the public regarding the effects of their projects. Consultation should be initiated early in the project planning process, before the project actually occurs. Often, an archeological survey will be conducted to identify and record sites. Sites which may be eligible for the National Register of Historic Places (NRHP) are defined as “historic properties”. Adverse effects to historic properties must be avoided or mitigated. Because Kennecott is an NHL, it has the highest designation under the National Register of Historic Places. Because of that significance, any action that is determined as having an adverse effect is automatically subject to review not only by the SHPO, but also the Advisory Council on Historic Preservation (ACHP) and the Secretary of the Interior.

2008 Nationwide Programmatic Agreement: The 2008 Programmatic Agreement (PA) between the NPS and the National Conference of SHPOs and the ACHP allows the NPS to streamline the compliance process from the standard NHPA process for certain activities such as maintenance and installation of signs provided that the projects meet certain criteria. The

streamlined process is used on many NPS projects in the park and must be reported to the SHPO on an annual basis. A separate PA describes the management of Kennecott specifically.

Kennecott Programmatic Agreement: An original 1999 Programmatic Agreement between the SHPO and Wrangell-St. Elias National Park and Preserve (WRST) has been replaced by the 2010 PA. Under the current PA, WRST may perform a variety of undertakings without initial review by the SHPO or the ACHP provided that those undertakings do not produce adverse effects, are in keeping with the Secretary of Interior's applicable standards and guidelines, and are monitored by an archeologist. The undertakings which were allowable for streamlined review under the 1999 PA were created in consultation with SHPO, local tribal councils, the Friends of Kennecott and the McCarthy Area Council. The 2010 expands those slightly and reflects the NPS Systemwide PA.

National Environmental Policy Act (NEPA): The cultural resources portions of NEPA are in some ways more inclusive than the NHPA. NEPA defines cultural resources more broadly than NHPA which is only concerned with sites and districts which are eligible for the NRHP. Under NEPA, cultural resources may include modern aspects of the human environment, historic and prehistoric buildings and sites, Native American sacred sites, and traditional use areas. Under NEPA, federal agencies must also consider indirect effects and cumulative effects as well as direct effects. NEPA actions usually require some form of review or comment from the public or from specific interested parties.

Secretary of the Interior's Standards and Guidelines on Historic Preservation: As part of the Department of the Interior, the NPS adheres to the Secretary's Standards. There are standards and guidelines for archeology and historic preservation, architectural and engineering documentation, professional qualifications, rehabilitation, treatment of historic properties, preserving, rehabilitating, restoring and reconstructing historic buildings, and for the treatment of cultural landscapes. These standards and guidelines influence topics from personnel decisions to treatment procedures for buildings at Kennecott.

Secretary of the Interior's Standards for the Treatment of Historic Properties: The following classes of treatment are recognized.

- *Preservation* means the act or process of applying measures necessary to sustain the existing form, integrity and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive mechanical, electrical and plumbing systems and other code-required work to make properties functional are appropriate within a preservation project.
- *Rehabilitation* means the act or process of making possible the efficient compatible use for a property through repair, alterations and additions while preserving those portions or features that convey its historical, cultural or architectural values.
- *Restoration* means the act or process of accurately depicting the form, features and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period.

- *Reconstruction* means the act or process of depicting, by means of new construction, the form, features and detailing of a non-surviving site, landscape, building, structure or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

NPS 28: Cultural Resource Management Guideline: Director’s Order 28 instructs the NPS to protect and manage NPS-owned cultural resources in accordance with *NPS Management Policies 2006*, comply with the Secretary of Interior’s Standards and Guidelines for Archeology and Historic Preservation, and follow the NPS Cultural Resource Management Handbook. Of particular relevance to management of historic structures at Kennecott are the following descriptions:

Ultimate Treatment (section 8:C.1.a): The ultimate treatment of a historic structure is a general definition of its development limits based on considerations of use and the historic character that should be presented to the public. It is accomplished through one or more construction projects, after which the structure is preserved by preservation maintenance. Subsequent rehabilitation or restoration may be needed to update the structure’s functional aspects and to repair or replace damaged or deteriorated features. Pending ultimate treatment, a structure is stabilized and protected in its existing condition; it may also receive interim treatment compatible with its planned appearance and use.

Removal or Neglect (section 8:C.1.c):

Demolishing a historic structure or deliberately allowing it to decay naturally is justifiable only when all alternatives have been determined infeasible in the planning process. *NPS Management Policies 2006* prohibits demolition unless necessary for public safety or to eliminate an unacceptable intrusion. No structure listed in or potentially eligible for the National Register will be removed or deliberately neglected without review by cultural resource specialists and approval by the regional director.

Executive Order 13006: Executive Order 13006 directs federal agencies to “utilize and maintain” historic properties and encourages them to locate federal facilities in historic properties particularly those within historic districts.

36 CFR-79: Curation of Federally Owned and Administered Archeological Collections outlines the standards and guidelines for the curation of cultural resource collections. These regulations include information on the facilities in which artifacts are stored and exhibited, how and to whom artifacts may be loaned, and how to keep records associated with each artifact.

Kennecott National Historic Landmark Mitigation of Hazardous Material Issues Work Plan: This agreement, signed in 1999 by the NPS and Alaska Department of Environmental Conservation (ADEC), requires NPS to mitigate hazardous materials issues and identifies methods and strategies to do so. It specifically identifies 144,000 square feet of building surfaces covered with lead-based paint. The recommended management option is that the potential exposure to lead-based paint be mitigated as part of the stabilization/maintenance of the site, through a combination of removal and disposal of the lead-based paint, encapsulation of the lead-based paint or repainting with non-lead paint, or capping impacted surrounding soils.

Title 43 CFR 36.11(g)(2): This Alaska-specific regulation was promulgated in 1986. This regulation authorizes federal agencies to issue permits for the use of Off Road Vehicles (ORVs) on existing ORV trails, except in areas designated as wilderness, upon a finding that such ORV use would be compatible with the purpose and values for which the area was established. Permit conditions are required to protect resources. Under this regulation, recreational use of ORVs may be permitted on existing trails, in the park or preserve portions of Wrangell-St. Elias, with a finding of compatibility.

Title 36 CFR 13.46: Allows the use of surface transportation traditionally employed for subsistence uses. The 1986 Wrangell-St. Elias National Park and Preserve General Management Plan made the determination that ORVs were a traditional means of access to subsistence resources in the park.

Title 36 CFR Part 13: This section lists the regulations for the National Park System Units in Alaska. Subpart V lists the special regulations that apply to Wrangell St. Elias National Park and Preserve and section 13.1904 lists regulations specific to the Kennecott Mines National Historic Landmark.

Appendix 2. Zone by Zone Proposals

Introduction: The following sections describe specific NPS proposals for structural stabilization/preservation, interpretation, vegetation management, and small scale features. The proposals specifically apply to NPS property. The described zones are based on those described in the 2001 Cultural Landscape Report (see Figure 2), as follows:

- **Administrative Core:** Includes the following historic structures: General Manager's Office, Hospital, Railroad Trestle, Assay Office, Railroad Depot, and the Company Store. This zone consists entirely of NPS lands.
- **Industrial Core:** Includes the tram terminus, the mill building, the Leach Plant, the Machine Shop, the Power Plant, and the Transformer House. With the exception of Lots 64, 65, 66, and 76, this zone is made up of NPS lands.
- **Commercial:** Includes the NPS owned Refrigerator Plant, West Bunkhouse, New School, Recreation Hall, Old Schoolhouse, and Dairy Barn. Outside of these historic structures and lots, this zone consists mostly of private lands.
- **Residential A:** Residential area south of National Creek includes the East Bunkhouse, National Creek Bunkhouse, north Silk Stocking cottage, and south Silk Stocking Cottage. This zone is an equal mix of NPS and private lands.
- **Residential B:** Residential cottages north of National Creek along the railroad bed includes Kennecott Cottage 39C, Lot 88; Kennecott Cottage 13C, lot 80; and Kennecott Cottage 39B, Lot 87. This zone consists mostly of private lands, interspersed with NPS owned lots.

Administrative Core Zone

Archeological Resources: 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. Areas within this zone that include a high density of archeological features include National Creek, the Sawmill and Carpenter's Shop, and the Store and Warehouse.

Vegetation: The following vegetation clearing would 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 woody vegetation within 30' of all structures.
- Limb trees up to 10' above the nearest surface fuel within 100' of all structures.

Area will continue to be monitored for invasive plants and populations of such will be manually removed.

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 (see Figure 3). This trail would connect with the Old Wagon road and Silk Stocking Loop described in the Residential A zone.
- Reconstruct hose houses which are historically appropriate and replicate original signs. Reconstructed hose houses may be used in association with the proposed fire suppression system. See NPS Utilities and Infrastructure section.

General Manager’s Office

What has been done: Between 2004 – 2009, reconstruction of site to reverse previous flood damage and installed ramp that meets Americans with Disabilities Act (ADA) standards, constructed cribbing retaining walls, removed lead contaminated materials, dismantling and reconstruction of east, north and west additions, replaced deteriorated logs at foundation, new foundation, restored log structure, new electrical wiring and lighting, interior restoration, restored and replaced wood windows and doors, widen doors for ADA access, painted exterior and interior, reinstall cabinet works. Historic photos were added to rooms on ground level in 2009.

Proposed Actions (structural): 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.

Interpretation: Open to the public. Develop a historic furnishings plan and exhibits plan. Part of self-guided walking tour.

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

Hospital

What has been done: Severe flood damage in 2006. Foundation stabilized, removal of ruins from east end. Windows and doorways screened to control access into unstable and unsafe environment.

Proposed Actions (structural): Implement interior false-work to keep walls, floors and roof from collapsing. Maintain a roof. No interior access proposed. No painting proposed.

Interpretation: Protect 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

What has been done: Severe flood damage in 2006 resulted in a loss of structural integrity. Removed and relocated salvageable building parts to another site in 2010.

Proposed Actions (structural): Will move salvageable remains of the building back to its original location.

Interpretation: Protect 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

What has been done: 2002: Lead paint mitigation, lifted and leveled, new foundation, siding repairs, construct interior ticket counter, stove, restored interior finishes, painted exterior siding, and new roofing.

Proposed Actions (structural): Cyclic maintenance. Restore electrical.

Interpretation: Open to the public. Replicate original Wells Fargo and Railroad Depot signs. Develop a furnishings plan and exhibits plan. Consider this space as a possible location for Alaska Geographic store.

Sawmill and Carpenters Shop

What has been done: Nothing. Structure collapsed in the 1970's.

Proposed Actions (structural): Allow ruin to deteriorate in place.

Interpretation: Interpret as a ruin. Part of a self-guided walking tour.

Vegetation: Keep site free of vegetation in order to interpret as ruin and to protect from fire/rot.

Company Store

What has been done: 2008 Phase I work included lifting and leveling of building, subfloor excavation for access, new foundation, floor structure, retaining wall at east elevation, removed siding, installed structural shear diaphragm and wall structure, reinstall siding, restored and replaced windows and doors, new electrical wiring, new furnace, clean and mitigate lead paint in store area, reconstructed egress rampways, repainted, constructed curatorial storage area and ranger cache. Opened as visitor contact station.

Proposed Actions (structural): Phase II 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 primary visitor contact point and administrative office space.

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

Interpretation: Develop a furnishings plan and exhibit plan. Open to the public. Maintain as primary visitor contact point. Develop a furnishings plan and exhibit plan. Consider developing the outside area of the front and back of store as a gathering place for visitors. Replicate original Post Office sign.

Small scale features: Maintain Hoist House. 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

What has been done: Reconstructed in 2009 to allow construction access to buildings on the north side of National Creek. Providing owner access to property north of National Creek was also given as a justification for the work at the time it was done, although an adequate ford was available next to the trestle, and no community input on the reconstruction plan was sought prior to the work being done (which will be avoided in the future; see the sections on Partnerships and Communications). Work included dismantling of flood damaged trestle, contracted for concrete footings, and constructed replica of historic trestle.

Proposed Actions (structural): Minor finish work such as closing up utilidor. Cyclic maintenance.

Interpretation: Part of a self-guided walking trail. Possible interpretive exhibit opportunity.

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

National Creek Re-Channelization

What has been done: Re-channelization using rip-rap done in 2010.

Proposed Actions (structural): Work on National Creek will include building a flood wall by the upper foot bridge and placing rip-rap at the East Bunkhouse.

Vegetation: Re-vegetate for stabilization with alder and willow cuttings taken from local source populations.

Industrial Core Zone

Archeological Resources: This zone contains a high density of archeological resources. 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. This includes the concentration mill ore chute.

Vegetation: The following vegetation clearing would 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 woody vegetation within 30' of all structures.
- Limb trees up to 10' above the nearest surface fuel within 100' of all structures.

Selective thinning for viewshed would also be undertaken in order to enhance views. Specific areas of consideration in this zone would 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 (See Figure 3). Revegetation of disturbed areas (such as proposed water lines or temporary roads) would be conducted utilizing native herbaceous vegetation seed collected from the surrounding area. Area will continue to be monitored for invasive plants and populations of such will be manually removed.

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

- Construct accessible trails and boardwalks behind the power plant, machine shop, and leaching plant (See Figure 3).
- Reconstruct hose houses which are historically appropriate and replicate original signs. Reconstructed hose houses may be used in association with the proposed fire suppression system. See NPS Utilities and Infrastructure section.

Tram Terminus

What has been done: Friends of Kennecott re-roofed in the 80s; NPS has maintained brushing; maintained roof; supported foundation repairs; walkway and railing; secured the site with doors.

Proposed Actions (structural): Scheduled for 2016 are structural repairs to the upper mill including the tram deck, structural reinforcement to ore bin, floor repairs, and reconstruction of upper tram deck roof. Long term plans (more than 10 years) include window replacement and painting in order to protect interior work and stabilization.

Interpretation: Open to the public. Part of a self-guided walking tour. Possible interpretive exhibit opportunity.

Vegetation: Maintain scenic views through continued brushing.

Small scale features: Brush plants and remove building material to expose the utilidor running from Tram Terminal to Power Plant.

Concentration Mill

What has been done: Study, design, and engineering for the internal stabilization of the building. NPS has a concessions contract with St. Elias Alpine Guides to conduct mill tours.

Proposed Actions (structural): Work on the mill will take place in two Phases. Phase I - 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 is scheduled for 2011, with other work scheduled for 2012. Access for 2012 work may require construction of two temporary access roads and scaffolding in order to get equipment needed for stabilization into the upper levels of the mill building (see Figure 3). The proposed temporary access road from the north side would come off the existing Portal road, through Lot 75 and end 100 – 150' from the north side of the mill building. At this point, scaffolding would be used to bridge the unvegetated gap between the end of the road and the north elevation of the mill building. The road from the south side would begin past the GMO and provide access to the mill building just east of the Hancock addition. 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.

Phase II – Work to include structural repairs to the mill structure at Levels 8 and above. This work is currently planned for 2015 and will include foundation and column and truss repairs,

stabilization of the ore bins and repairs and reconstruction to the upper tram deck to include the reestablishment of the original roof.

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.

Archeological resources: Replace ore chute.

Interpretation: Interpretation of the stabilized mill building through partnership/concession-led tours that meet NPS standards for interpretation. Possible interpretive exhibit opportunity in the sacking shed and outside of the building.

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; and clear tailings from north side of the shed south of mill building.

Leaching Plant

What has been done: Measures were taken to prevent collapse or further deterioration of the building, including temporary roofing and foundation repairs on the sacking shed.

Proposed Actions (structural): Ongoing work to include repairs to halt collapse onto railroad corridor, site stabilization, lifting and leveling sacking sheds, foundation replacement, repairs to floor and wall structure, lead paint mitigation (including painting), rehabilitation of doors and windows to control access. Scheduled 2017 work includes structural repairs to the west, north and south 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.

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 reinstatement of original equipment such as shaker tables and crushers that demonstrate the different milling processes. Possible interpretive exhibit opportunity outside of the building.

Small scale features: Stabilization/reconstruction of bracing and the original track incline for the leaching plant deck, north of leaching plant; reconstruction (in conjunction with the wood flume) of utilidor from power plant to leaching plant. Reestablish the deck at the north elevation, integrate ADA ramp into sacking shed. Also clear building material around and on utilidor structure.

Machine Shop

What has been done: 2002 work included new foundation, retaining wall construction, partial roof reconstruction, re-roofing, siding repair, painting, and some window replacement.

Proposed Actions (structural): Scheduled 2016 work to include reestablishment of collapsing service decks on north and south sides, door and window repairs and siding repair. Scheduled 2018 work includes reconstructed porch roof over east entrance.

Interpretation: Open to the public. Develop a furnishings plan and exhibits plan. Part of a self-guided walking tour.

Power Plant

What has been done: 2007 work included repair/replacement of entire building foundation, column repairs, partial roof replacement, re-roofing, smoke stack capping and structural stabilization, exterior wall repairs, ADA rampway system, access control, alleyway boardwalks. Repainted doors to mitigate lead paint hazard. Exhibit panels installed.

Proposed Actions (structural): 2011: Mediate oil and asbestos in the area. Boiler and stack preservation treatment. 2012 window repair/lead abatement including painting.

Interpretation: Maintain four interpretive exhibit panels on upper mezzanine. Part of a self-guided walking tour.

Small scale features: The following are proposed:

- 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.
- Clear building material from around and possibly reconstruct wood flume south of power plant.
- Reclad in corrugated metal utilidor sheds north and east of oil house.
- Maintain deck at oil house west of power plant.
- Brush plants in area and remove building material on top of utilidor on east power plant wall.
- Brush plants and where necessary excavate utilidor from oil house to oil storage tanks.
- Excavate utilidor west of power plant.
- Maintain utilidor from oil shed to oil shed.

Transformer House

What has been done: 2006 work included asbestos abatement and site clearing, french drain installed to underground water spring, partially re-roofed.

Proposed Actions (structural): Work scheduled for 2012 includes site grading to resolve drainage into the building, new foundation, repairs to floor structure, repairs to exterior siding, windows, doors, reroofing, and painting. Possible use as housing for water treatment.

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

Commercial Zone

Archeological Resources: 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.

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

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

Vegetation screening will be considered in this zone, particularly to screen the Dairy Barn area from the shuttle turn-around viewshed. Disturbed area revegetation would be considered as needed utilizing native herbaceous vegetation seed collected from the surrounding area. Area will continue to be monitored for invasive plants and populations of such will be manually removed.

Refrigerator Plant

What has been done: 2008 work included reconstruction of south, west walls and floor framing, roof repairs and reroofing, window and door repairs, lead mitigation and painting, new electrical wiring and lights and new steps and porch. Opened to visitors.

Proposed Actions (structural): Cyclic maintenance.

Interpretation: Open to the public. Develop a furnishings plan and exhibits plan. Part of a self-guided walking tour.

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

West Bunkhouse

What has been done: 2003 work included a new shingle roof and interior lead paint mitigation.

Proposed Actions (structural): 2012 and 13 work to include exterior rehabilitation to include new foundation, floor and wall repairs, construct 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 tie this building in with potable water and sewer systems.

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.
- Partnership may be in collaboration with other entities (such as Kennecott Corporation, Friends of Kennecott, etc.)

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 relective 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 renovation, in cooperation and consultation with prospective partner. After adaptive re-uses to support partnership have been determined, develop a furnishings plan and exhibit plan. Part of a self-guided walking tour.

New Schoolhouse

What has been done: 2003-2009 work included lifting and leveling of building, new foundation, floor structure, foundation skirting, lead paint mitigation, remove and restore historic siding, install shear diaphragm, restore doors and windows, reestablished two working restrooms, restored interior finishes, new electrical system and lighting, new septic and leach field system. Used as site maintenance offices and crew training room.

Proposed Actions (structural): ADA ramp to be completed in 2011. Restore classrooms after maintenance activity is removed from building. Install chalk boards, refinish floors 2016. In use as maintenance facility at least through 2018.

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

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

Recreation Hall

What has been done: 2001 - 2003 work included new foundation, dismantled and reconstructed east and west wall structure, lead paint mitigation, removed and reinstalled interior walls and ceiling and exterior siding, installation of structural shear diaphragm, repairs to trusses and roof sheathing, lead paint mitigation, exterior and interior painting, interior finishing, restoration of windows and doors, construction of ADA ramp, furnace, new electrical wiring, projector installation, furnace and ducting installation. In use as interpretive theater and shared community hall.

Proposed Actions (structural): Cyclic maintenance.

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

Interpretation: Two interpretive panels exist. Open to the public. Part of a self-guided walking tour.

Small scale features: Hose house has been reconstructed. If possible, utilize to provide water source for fire suppression in proposed water and fire suppression system (see NPS Utilities and Infrastructure).

Old Schoolhouse

What has been done: 2009 work included dismantling and reconstruction of the west and east walls, lead paint mitigation, removed and reinstalled historic siding, installed shear diaphragm, restored windows and doors, reroofing, new electrical and lighting, interior and exterior painting, and floor repairs. In use as park offices.

Proposed Actions (structural): Cyclic maintenance.

Interpretation: Part of a self-guided walking tour. Possible interpretive exhibit for the outside of the building.

Partnerships: Intent is for NPS to vacate this space when Company Store is finished. This is long term. After NPS vacates, potential uses include winter caretaker quarters or partnership office space.

Dairy Barn

What has been done: 2010 work included new foundation and roof, construction of a shear diaphragm, lead paint mitigation including painting, door and window repairs, insulation, interior finishes, new electrical system, lights, plumbing. Connections to existing septic system/leach field.

Proposed Actions (structural): Communication system installation. Cyclic maintenance. Future use as shop/break room and this area will be utilized for employee parking. NPS will explore some solar installation potential for this site.

Residential A Zone

Archeological Resources: 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.

Vegetation: The following vegetation clearing would 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 woody vegetation within 30' of all structures.
- Limbing of 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 would occur in order to open views of the Kennicott glacier and/or mill building. Specific locations include (See Figure 3):

- 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 manually 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 would be cleared and maintained for pedestrian use only. The landslide would be by-passed or a trail constructed through it (see Figure 3).

East Bunkhouse:

What has been done: 2010 work included excavation of flood materials from the interior of the structure, lead waste removal, foundation replacement, and repairs to exterior structural walls,

shear diaphragm, floor structure, and access control. Work also included removal of bathhouse wing from the west end of the building.

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

Interpretation: No interior access. Part of a self-guided walking tour.

National Creek Bunkhouse:

What has been done: Windows and doors screened to prevent access.

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

South Silk Stocking Cottage:

What has been done: 2008 work included new foundation, roofing, window and door rehab, exterior and interior lead mitigation, painting, refinished floors, new electrical wiring, propane lighting, plumbing, septic/leach field. In use as employee housing. Missing garage structure reconstructed to provide summer storage, for both cottages, to keep staff bicycles etc. out of the landscape and provide space for power generator and backup battery bank.

Proposed Actions (structural): Cyclic maintenance.

Interpretation: Part of a self-guided walking tour.

North Silk Stocking Cottage:

What has been done: 2008 work included new foundation, roofing, window and door rehab, exterior and interior lead mitigation, painting, refinished floors, new electrical wiring, propane lighting, plumbing, septic/leach field. In use as employee housing.

Proposed Actions (structural): Cyclic maintenance.

Interpretation: Part of a self-guided walking tour.

Residential B Zone

Archeological Resources: 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.

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 woody vegetation within 30' of all structures.
- Limbing of 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 (see Figure 3).

Encourage and/or allow vegetable and flower gardens present in 1938, vegetable beds, flower boxes. 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 manually 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. Two interpretive panels.

Proposed Actions (structural): Tentative for 2014 but not funded. Work to include roofing, 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.

Interpretation: Open to the public. Develop furnishings plan and exhibit plan. Part of a self-guided walking tour.

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

Small-scale features: If permission/cooperation can be obtained from adjacent landowners, consider re-establishing boardwalks in front of the cottages in this zone on the west side of the railroad bed.

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. 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: Recently acquired by NPS.

Proposed Actions (structural): Not funded at this time. Potential work to include roofing, lead paint mitigation, repairs to interior paneling, floors and ceiling, new electrical wiring and lights, interior and exterior painting, doors and window repairs. Consider as potential future office space or backcountry contact station.

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

Vegetation: If structure is preserved, consider re-establishment of historical vegetation - this may be a lawn and garden.

Small scale features: If permission/cooperation can be obtained from adjacent landowners, consider re-establishing boardwalks in front of the cottages in this zone on the west side of the railroad bed.