

Attachment A. Determination of Non-Impairment

The Prohibition on Impairment of Park Resources and Values

NPS Management Policies 2006, § 1.4.4 explains the prohibition on impairment of park resources and values: “While Congress has given the National Park Service (NPS) management discretion to allow impacts within units of the national park system, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the NPS must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the 1916 Organic Act, establishes the primary responsibility of the NPS. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.”

What is Impairment?

NPS Management Policies 2006 §1.4.5: What constitutes Impairment of Park Resources and Values and §1.4.6: “Impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values.” §1.4.5 of Management Policies 2006 states: “An impact to any park resource or value may, but does not necessarily, constitute impairment. An impact is more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park
- Key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- Identified as a goal in the park's general management plan or other relevant NPS planning documents as being of significance.

An impact would be less likely to constitute impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values and it cannot be further mitigated.”

Per §1.4.6 of Management Policies 2006, park resources and values at risk of being impaired include:

- the park's scenery, natural and historic objects, and wildlife, and the processes and condition that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structure, and objects; museum collections; and native plants and animals;
- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- the park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and

- any additional attributes encompassed by the specific values and purposes for which the park was established.

Impairment could result from NPS activities in managing the park, visitor activities, or activities undertaken by concessionaires, contractors, and others operating in the park. Impairment could also result from sources or activities outside the park, but this would not be a violation of the 1916 Organic Act unless the NPS was in some way responsible for the action.

How is an Impairment Determination Made?

§ 1.4.7 of Management Policies 2006 states, "In making a determination of whether there would be an impairment, an NPS decision maker must use his or her professional judgment. This means that the decision-maker must consider any environmental assessments or environmental impact statements required by the National Environmental Policy Act of 1969 (NEPA); consultations required under section 106 of the National Historic Preservation Act (NHPA); relevant scientific and scholarly studies; advice or insights offered by subject matter experts and others who have relevant knowledge or experience; and the results of civic engagement and public involvement activities relating to the decision." Management Policies 2006 further define "professional judgment" as "a decision or opinion that is shaped by study and analysis and full consideration of all the relevant facts, and that takes into account

- the decision-maker's education, training, and experience;
- advice or insights offered by subject matter experts and others who have relevant knowledge and experience;
- good science and scholarship; and, whenever appropriate; and
- the results of civic engagement and public involvement activities relating to the decision."

Impairment Determination for the Approved Plan

This determination of no impairment has been prepared for the Selected Action as summarized in the Record of Decision and described further in Alternative 5 of FEIS. This determination is provided for the following topics analyzed in the FEIS: Air quality, Soils, Water Resources, Vegetation, Fish and Wildlife, Special Status Species, Archeological Resources, Cultural Landscapes, Scenic Resources and Wild and Scenic River Values. As explained above, impairment determinations are not rendered for the following impact topics: land use, geologic hazards, visitor experience (access and transportation, visitor use opportunities, interpretation and education, and visitor and employee safety), socioeconomics, and park operations. These impact topics are not generally considered to be park resources or values according to the 1916 Organic Act.

Air Quality

Under the Clean Air Act, Lake Chelan NRA is a class II airshed and is within a National Ambient Air Quality Standards (NAAQS) attainment zone for all ambient air quality standards. Recent data show that air quality in Lake Chelan NRA is generally very good; the air quality is below the NAAQS for particulate matter, nitrogen dioxide, sulfur dioxide, nitrates, sulfates, and ozone. However, air quality in the Stehekin Valley is periodically affected by pollutants both within and outside the valley, including refineries and smelters, emissions from wood and pellet heating devices in the valley, and dust from the unpaved Stehekin Valley Road during the summer months. Identified as one of Lake Chelan National Recreation Area's fundamental resources and values, air quality contributes to the ecological integrity of the park unit and effects human health, visitor enjoyment, scenic vistas, and the preservation of natural systems and cultural resources in the park unit.

The Selected Action would have a variety of short-term negligible to moderate adverse impacts to air quality from activities associated with road construction and the construction of recreational facilities.

These short-term operations impacts would occur from particulate emissions during vegetation removal, soil excavation, filling, and grading of the road; exhaust emissions during vehicle travel, transport of fill materials, and ongoing construction; and evaporate emissions during surfacing, painting, and solvent use. Due to the implementation staging over a period of years (1-3 for road improvements; 3-15 for erosion protection measures, recreational improvements, and housing and maintenance facility construction), these emissions would occur in a number of areas, often widely spaced in time and distance and would be primarily limited to the project corridor. In addition, mitigation measures would reduce the intensity of these short-term adverse impacts to air quality by ensuring that dust is kept to a minimum, transportation and associated emissions are limited when feasible, and activities such as burning vegetation are avoided entirely. In comparison, the long-term impacts to air quality associated with the Selected Action would be primarily beneficial and would include 1) elimination of fugitive dust emissions on the Stehekin Valley Road from road surfacing, 2) reduction of exhaust emissions from decreases in trips needed by dump trucks and graders to maintain a gravel road through a natural floodplain, 3) reduction in particulate emissions from the establishment of plant communities along the Stehekin River shoreline and in the current maintenance and housing area, and 4) reduction in emissions, primarily associated with heating, from designing and constructing energy efficient buildings (minimum silver LEED certification).

Overall, there would be no major adverse impacts on air quality or air quality-related values from the proposed actions in the Selected Action. The area would continue to be within an attainment zone for NAAQS as a Class II Airshed and long-term or cumulative impacts to air quality relative values would not occur. As a result, there would be no impairment of air quality resources or values from the Selected Action.

Soils

The Stehekin Valley within Lake Chelan National Recreation Area contains 22 distinct soil series. The movement of the river and its tributaries erodes and deposits sediment – creating floodplains, alluvial fans, and terraces, while the steep valley walls are covered with varying amounts of glacial sediment, talus, bare rock, colluvial (slope) deposits, and volcanic ash. Together, these soils and the geologic systems that they are a part of are recognized as a fundamental resource and value in Lake Chelan National Recreation Area and are key to the natural integrity and enjoyment of the park.

The Selected Action would have localized short-term negligible to moderate adverse effects on soils from ongoing road maintenance and rehabilitation and would have localized long-term minor to major adverse effects on soils from road and trail construction/realignment, construction of new maintenance and housing areas, and camp and dock relocation. Approximately 13 acres, including 30,000 cubic yards of cut and 25,000 cubic yards of fill, could be affected from construction of the roadway and installation of pullouts and culverts. This disturbance would affect productivity of soils along the corridor and areas within 20 - 25 feet on either side. Additional, similar adverse effects (affecting up to 1.2 acres) would occur from construction of the Reroute Access Connector, except that the Connector would be constructed at grade to minimize impacts to wetland soils and vegetation. There would be additional localized, short- and long-term minor to moderate adverse effects on soils from the installation of erosion protection measures that involve the importation of rock and fill, compaction, loss of plant cover and other factors on up to four acres in eight different areas. However, these adverse impacts would be coupled with long-term negligible to minor beneficial effects from bioengineering and reuse of excavated soils and rock in the design of these features, and soil productivity could be retained because barbs and logjams would reduce the rate of erosion along riverbanks. Similarly, long-term negligible to moderate beneficial effects would occur from returning conserved topsoil to the cleared areas along the road reroute and stabilizing soils with temporary sediment and erosion protection barriers, and additional beneficial effects would be noticeable from dust reduction and vegetation restoration following initial disturbance. Upland and riparian restoration of the former maintenance area would also have localized beneficial

effects on soils. Other potential beneficial effects to soils could occur if the McGregor Meadows Access Road is eventually no longer needed and the area is converted to a trail or restored entirely.

Impacts to soils from the Land Protection Plan would be limited. While up to 29 acres, across 10-15 parcels, could be exchanged under this plan for residential development, these lands identified for exchange are generally located on gravelly soils, which are not sensitive or subject to compaction or surface erosion. Depending on the actual approved land uses, this development could have minor to moderate impacts on these soils. However, long-term moderate to major beneficial effects on areas with sensitive soils would occur from acquiring riparian area parcels in exchange or by direct purchase, resulting in removal of development from the Stehekin River floodplain and channel migration zone.

Although impacts to soils from implementing the Selected Action would be significant, the adverse impacts would not result in impairment because of the limited extent of the impacts and the context in which the impacts would occur. The long-term adverse impacts to soil resources would occur entirely within the road reroute and access connector corridors and in specific locations where housing and development are constructed. While these areas could total up to 24 new acres of disturbance, most of this disturbance would be coupled by restoring similar acreage in riparian habitat within the Stehekin River floodplain and channel migration zone. Furthermore, the long-term adverse impacts to soils identified above are an unavoidable result of actions that are necessary to preserve the integrity of park resources and values: the relocation of development (road and buildings) outside of the Stehekin River's channel migration zone, and cannot be further mitigated. By relocating this development and thereby implementing the Selected Action, the NPS would protect the integrity and character of another fundamental resource and value of Lake Chelan National Recreation Area, the Stehekin River.

Water Resources (Hydraulics and Streamflow, Water Quality, Wetlands and Floodplains)

The Stehekin River is the focal point of Lake Chelan NRA and is identified in the park unit's foundation document as a fundamental resource and value of this unit in the national park system. The river drains 220,000 acres (344 square miles) of mostly public and undeveloped land in the rugged Glacier Peak Wilderness Area, Lake Chelan NRA, and North Cascades National Park, and most of the watershed is within designated wilderness. Because the river's headwaters originate along the Pacific Crest, it receives the heavy precipitation characteristic of the west side of the Cascades. Steep slopes, a dense network of steep tributary streams (including Bridge Creek, Agnes Creek, Company Creek, Rainbow Creek, and Boulder Creek), and the circular shape of the watershed also contribute to the frequent and rapid rise of floodwaters in the lower valley.

Hydraulics and Streamflow

By moving the Stehekin Valley Road out of the channel migration zone, the Selected Action would have mostly long-term beneficial effects on hydraulics and streamflow because it would allow natural processes, such as floodplain storage of floodwaters, wood, and gravel and lateral migration of the channel, to predominate in more areas and would diminish the need for additional erosion protection structures in the future. While long-term negligible to moderate effects to hydraulics and streamflow would be caused by the installation of culverts along the road reroute and erosion protection measures within or on the edge of the channel migration zone, these impacts cannot be further mitigated and are unavoidable results of the more necessary action of rerouting the road. Some short- and long-term minor adverse impacts would occur from the construction Reroute Access Connector, but long-term minor to moderate beneficial effects would occur from the restoration of the McGregor Meadows Access Road if it is no longer needed. In addition, restoration and bioengineering along the river corridor would have long-term localized minor to moderate beneficial effects on hydraulics and streamflow by increasing the stream bank cover, and long-term moderate beneficial effects would occur from maintenance facility and housing

replacement and relocation and the removal of other structures (i.e. private development) from the floodplain (e.g. houses in the floodplain).

Water Quality

The Selected Action would have localized negligible to moderate long-term adverse effects on water quality from existing development and operations. Runoff from the roadway, including the reroute and developed areas, would continue to have short-term negligible to minor adverse effects on water quality while long-term minor to moderate beneficial effects would likely occur from reducing sediment erosion where the roadway was surfaced. If future flooding affected the short unpaved Reroute Access Connector, there would be short-term minor to moderate adverse impacts on water quality. In addition to existing development and operations, the Selected Action would have short-term localized negligible to moderate adverse effects on water quality from construction associated with the road reroute and Reroute Access Connector, the relocation of NPS housing and maintenance facilities, the development of recreational facilities, and the installation of culverts and erosion protection measures. However, many of these actions would also result in the protection of development in the valley and the retention of key portions of the Stehekin Valley Road and would thus contribute to long-term negligible to moderate beneficial impacts on water quality by decreasing water contamination and slope instability. The removal of structures from the floodplain/channel migration zone, particularly the maintenance facility, would also have minor to moderate adverse impacts to water quality coupled with long-term moderate to major beneficial effects by removing potential sources of contamination from the channel migration zone.

Wetlands

Overall, the Selected Action would affect 0.64 acres of wetlands. While restoration of 1.5 acres of palustrine forested wetlands and the acquisition of lands within the floodplain would have long-term negligible to moderate beneficial impacts to wetlands in the Stehekin River watershed, jurisdictional wetlands would be impacted by the installation of erosion protection measures (barbs and logjams), culvert modifications, and the construction and development of the Reroute Access Connector. Specifically, the Reroute Access Connector would affect 0.1 acres of wetlands, a long-term minor to moderate localized adverse effect, and erosion protection measures would have short-term minor to moderate adverse effects from the construction of barbs and logjams coupled with long-term beneficial effects from revegetation and riparian restoration. There would be negligible to minor short-term adverse effects from procuring large woody debris from the floodplain. Despite these adverse impacts, the road reroute would prevent impacts to the floodplain /channel migration zone during future flood events (removing potential sources of contamination), comprising long-term minor to moderate beneficial effects.

Floodplains

There would continue to be adverse impacts from retaining a roadway in the floodplain / channel migration zone in several areas, including McGregor Meadows (the McGregor Meadows Access Road), from the Bakery to Lake Chelan (Stehekin Valley Road), above Company Creek (Stehekin Valley Road), and along Company Creek near Harlequin Bridge (Company Creek Road). Impacts from the Reroute Access Connector would be long-term, minor to moderate and localized. There would also be long-term minor to moderate adverse effects from retaining the Stehekin Valley Road in its current alignment near Milepost 3.8 (Frog Island), Milepost 5.3 (Wilson Creek), Milepost 8.0 and 8.5. Negligible to minor adverse effects would occur from maintaining recreational facilities in the floodplain and long-term minor to moderate adverse impacts would occur from existing and new erosion protection measures, with three structures on the edge of the channel migration zone and one within it. Long-term moderate to major beneficial effects would occur from relocating the housing and maintenance areas (including the fuel storage area) outside of their regulatory floodplains and from restoring floodplain values and functions via the reroute. Long-term minor to moderate beneficial effects would also be contributed by allowing floods

to overtop riverbanks and by restoration and bioengineering from slowing bank erosion. Implementation of the Land Protection Plan could result in long-term moderate to major beneficial effects if private development was removed from the floodplain / channel migration zone through exchange or acquisition. Overall, the Selected Action would move toward less development within the floodplain, which would have a long-term beneficial effect.

Water resources are necessary to fulfill the purposes for which the park was established, are identified in park planning documents as significant, and are key to the natural integrity and enjoyment of the park. There would be a wide range of adverse and beneficial impacts on water resources, including to hydraulics and streamflow, water quality, wetlands and floodplains. Major changes, such as rerouting the Stehekin Valley Road out of the floodplain / channel migration zone where possible and using erosion protection measures where it is at the edge of this zone, as well as relocating the portions of the maintenance and housing areas that are within this zone would improve conditions. Adverse impacts would be reduced by the application of mitigation measures, such as restoration of riparian areas and ensuring that stream simulation guidelines are followed. There would be no impairment of water resources or water resources values.

Vegetation

The Stehekin Valley contains a wide diversity of plant species and vegetation communities. The riparian areas within the valley provide the highest diversity of vegetation types, including relatively nutrient rich plant communities that are disproportionately important for wildlife. Outside the riparian zone, the upland forest also provides important wildlife, including notable rare species such as the spotted owl, which is federally threatened.

There would be long-term minor to major adverse effects from construction of the new maintenance and housing areas and localized beneficial effects from upland and riparian restoration of the former maintenance area. Short-term negligible to moderate adverse effects from ongoing road maintenance and from rehabilitation, including construction of winter turnaround and pullouts would also occur. There would be minor to moderate short- and long-term adverse effects from road realignment at Wilson Creek (including construction and maintenance of an access road), relocation of campsites and docks at Weaver Point, and minor to moderate adverse effects from construction of the Lower Valley Trail. Additional beneficial effects from dust reduction and vegetation restoration would occur following disturbance.

Reroute: The reroute section is located primarily within upland mesic mixed coniferous forest dominated by Douglas-fir that grades to a riparian mixed deciduous / coniferous forest near the Lower Field. Although the reroute has been designed to avoid most of the largest trees, loss of vegetation in this area would include trees, shrubs, forbs, grasses, and ferns, as well as non-vascular plants, such as mosses and lichens. Approximately 13 acres could be cleared of vegetation within the construction limits for the 16-foot-wide, 1.9-mile-long reroute around McGregor Meadows. Because much of this area has not been disturbed by human activity except for portions that intersect with the Old Wagon Road, this would have both short-term major and long-term moderate localized adverse effects on vegetation, because forested landscape would be converted to new roadway. Because cuts and fills alongside the road would be revegetated and portions of the old road would be restored, over time, initial impacts would be reduced.

Restoration: Restoration of parts of the bypassed Stehekin Valley Road would have long-term beneficial impacts on 1.4 acres. Eventually shrubs, forbs and trees would reestablish within the area surrounding the road where cuts and fills were constructed. Indirect adverse effects would include changes to soil productivity and the plant community over time, such as invasion by nonnative species inadvertently imported in fill or within bare areas remaining from limited rehabilitation / restoration success. In addition, because of the reroute there would be a break in an area of formerly contiguous plant

community cover that would result initially in changes to the edges that could eventually spread outward. Because there would be more sunlight reaching road edges, the vegetation community could become more diverse over time.

Land Protection Plan: Approximately 8-10 acres could be developed if each of the 10-15 parcels included an access road and single-family dwelling. These areas were surveyed for rare plants and were selected because they are present in upland coniferous forest, rather than in other more sensitive vegetation types. A range of indirect adverse and beneficial effects (such as the potential for invasion by nonnative species and the conversion from a native landscape to a developed landscape) would also occur. Because impacts would be spread over the exchange parcels, they would be localized, but long-term and could be minor to major, depending on actual approved land uses. Negligible to minor beneficial effects would result from stipulations that retained key vegetation characteristics, including from covenants associated with how the parcels would be developed (stipulated in exchange/purchase agreements). Long-term moderate to major beneficial effects would occur from acquiring riparian area parcels in exchange or by direct purchase, resulting in removal of development from the Stehekin River floodplain and channel migration zone.

Erosion Protection Measures: There would be additional minor to moderate localized, short- and long-term adverse effects from the loss of plant cover and impacts to soils on up to four acres in eight different areas. These adverse impacts would be coupled with long-term negligible to minor beneficial effects from bioengineering, including revegetation. Erosion protection measures would also result in the retention of vegetation along the banks from minimizing erosion.

Vegetation resources are necessary to fulfill the purposes for which the park was established, are identified in park planning documents as significant, and are key to the natural integrity and enjoyment of the park. Although there would be a wide range of impacts, including to a large area associated with the reroute, beneficial impacts would retain vegetation in sensitive areas and mitigation measures would reduce impacts. There would be no impairment of vegetation or the values associated with it.

Fish and Wildlife

In the Selected Action, there would be short-term localized negligible to minor disturbance from noise and construction activity, short- and long-term localized negligible to moderate adverse impacts from new facilities or structures (new buildings, bank stabilization and recreational improvements), and long-term minor to moderate adverse impacts from new developed areas (such as for the new maintenance and housing areas and the Reroute Access Connector) on fish and wildlife. The road reroute would have short- to long-term moderate to major adverse impacts from habitat loss coupled with negligible to minor beneficial effects from edge habitat creation and eventual restoration of cut and fill slopes. There could be minor adverse effects associated with contaminated runoff from surfacing unpaved sections of the Stehekin Valley Road. There would continue to be negligible to minor adverse impacts from vehicle-wildlife collisions.

There would be a variety of negligible to moderate adverse and long-term minor to moderate beneficial impacts from erosion protection measures, including from habitat loss, revegetation and bank stabilization. There would also be potential short-term impacts from sedimentation from earth moving associated with installation of erosion protection measures and from procurement of large woody debris. Recreational facility construction and improvements would have short-term negligible to moderate adverse effects during construction and long-term negligible to minor adverse effects from habitat modifications and use. Beneficial effects from habitat restoration would be long-term, localized and negligible to moderate. There would also be long-term moderate beneficial impacts from habitat restoration of the former maintenance area. Beneficial impacts from the use of large woody debris would be from the use of wood vs. rock.

Healthy wildlife populations are necessary to fulfill the purposes for which the park was established, are identified in park planning documents as significant, and are key to the natural integrity and enjoyment of the park. The impacts from the Selected Action would affect areas of intact existing wildlife habitat in a common forest type and includes mitigation measures to reduce the scope of these impacts. Although localized impacts could range to major in the Selected Action due to effects on approximately 13 acres of wildlife habitat, within a total disturbed area of about 23 -24 acres, no species loss would occur and displaced species could use other nearby intact areas and future restored areas for habitat. As a result, there would be no impairment of wildlife or wildlife values.

Special Status Species

Impacts from the Selected Action would be not likely to adversely affect most special status species because they would primarily be associated with short-term construction impacts. Impacts would be short-term and negligible on gray wolves and grizzly bears; short-term and minor for lynx and wolverine; short- and long-term minor on fishers (with some negligible beneficial effects from restoration of riparian areas); and short-term negligible to minor on bald eagles. Most effects on aquatic species, including fish and amphibians would be avoided by conducting work in riparian areas outside of the spawning and incubation period and constructing all road-stream crossing to meet stream simulation guidelines.

Approximately 7.5 acres of northern spotted owl suitable habitat could be affected by noise and disturbance, a short- to long-term minor to moderate adverse effect, primarily associated with road rehabilitation. In addition, the road reroute would have long-term and moderate to major impacts on northern spotted owls associated with both noise and disturbance and habitat removal. Long-term negligible to minor beneficial impacts could occur from changes to foraging areas. Removal of forested habitat for the reroutes would also have moderate adverse effects on goshawks.

The Selected Action may affect and would be likely to adversely affect northern spotted owls and it may affect, but would not be likely to adversely affect the following listed, proposed or candidate species: grizzly bears, gray wolves, Canada lynx, Pacific fisher, bull trout, westslope cutthroat trout, pygmy mountain whitefish or Columbia spotted frog. Similarly, the proposed actions may affect, but would not be likely to adversely affect the following mammal, bird, and amphibian federal species of concern: mammals: California wolverine and western gray squirrel; birds: bald eagle, Pacific Townsend's big-eared bat, small-footed (Yuma) myotis, western long-eared myotis, fringed myotis or long-legged myotis, peregrine falcon, northern goshawk, olive-sided flycatcher, and black swift; and amphibians: western toad, spotted frog, Cascades frog, and tailed frog.

Viable populations of special status species are necessary to fulfill the purposes for which the park was established and are key to the natural integrity of the park. Northern spotted owls may have become extirpated from their existing nest site prior to project implementation by barred owls, or may return to the nest activity area. Among the conservation measures to minimize impacts to northern spotted owls include: if northern spotted owls are found in the project work area, project actions would not occur until after the nesting season. Other northern spotted owl nest sites within the lower Stehekin Valley would likely continue to produce young. Visitors and residents would likely continue to have the opportunity to experience rare glimpses of this threatened species and it would continue to occur in the lower Stehekin Valley. Because effects to special status wildlife would result primarily from noise and disturbance, because mitigation measures would be applied to limit habitat loss, because the proposed actions under the Selected Action are not expected to result in jeopardy to species (including northern spotted owls), and because the USFWS has concurred with the determinations of effect on listed species, there would be no impairment of special status species or values associated with them.

Archeological Resources

Pre- and post-contact archeological resources are identified as a fundamental resource and value of Lake Chelan National Recreation Area within the unit's foundation document and are therefore key to the cultural integrity and enjoyment of the park.

Because archeological resources have been surveyed for within the proposed project area; because archeological resources found were outside of the project area; and because the discovery potential for buried archeological resources would employ mitigation measures, including, at minimum, the halting of all work, the securing of the area, the documentation of resources by professionals, and the assessment of eligibility for the National Register of Historic Places, there would be no adverse effect on known archeological resources.

As a result, the Selected Action would not impair archeological resources or the values for which they have been protected.

Cultural Landscapes

Cultural landscapes – as specifically represented by the High Bridge Ranger Station, Buckner Homestead, and the Golden West Lodge – are identified as a fundamental resource and value of Lake Chelan National Recreation Area. These resources embody evidence of post-contact exploration, resource extraction and utilization, transportation, federal and tribal land management, and tourism and recreation, and are therefore key to the integrity and enjoyment of this unit of the national park system.

The Selected Action would have no adverse effect on cultural landscapes within Lake Chelan National Recreation Area. Rather, the Selected Action would have long-term beneficial effects on cultural landscapes by restoring riparian vegetation along the pasture and hayfield and thereby rehabilitating the cultural landscape at Buckner Homestead Historic District.

As a result of these assessed impacts, the Selected Action would not impair cultural landscapes or the values for which they have been protected.

Scenic Resources

As outlined in the foundation document for Lake Chelan National Recreation Area, scenery, that includes alpine meadows, countless cascades, towering mountains, and forested valleys, is a fundamental resource and value of this unit of the national park system. As such, scenic resources are key to the integrity and enjoyment of Lake Chelan NRA.

The Selected Action would have negligible to moderate short-term effects on scenic resources due to road and building construction, installation of erosion protection measures, and riparian restoration. As vegetation is removed, soil is disturbed, bioengineering is installed, and vegetation is slowly growing back, visitors would notice a change in the scenic resources within the project corridor. However, scenic resources along the Stehekin Valley Road corridor would be the most highly impacted area in both the short and long-term. In the short-term, the road would be rerouted from a forested corridor to a highly disturbed area with road cuts and fill, ranging from just larger than the road width (16 feet) to between 40 and 100 feet. While vegetation would eventually grow back to restore this forested corridor, the scenic views along the Lower Stehekin Valley Road would change with the reroute. Views of the river would be replaced by a more diverse, forested landscape, with improvements in views toward McGregor Meadows and a more vegetated and screened view of the river. Land development under the Selected Action could also result in cluster development which would have a long-term minor to moderate adverse impact on scenic resources from the road. However, the emphasis on removal of cabins in the channel migration

zone would improve scenic views along the river, a moderate long-term beneficial effect. The Selected Action would also have a long-term minor beneficial effect on scenic resources by opening up numerous nonroaded views of the Stehekin River, wildlife, and surrounding landscapes along the Lower Valley Trail.

Although the selected action would have some long-term adverse effect on scenic resources, the adverse impacts would not result in impairment. The long-term impacts to scenic resources would occur entirely within the project corridor and would be limited primarily to the rerouted section of the Stehekin Valley Road, which would eventually be characterized by a forested roadway. Visitors to Lake Chelan National Recreation Area would continue to be able to experience scenic views of countless cascades, towering mountains, and forested valleys that are integral to this park unit's scenic resources. Despite slight changes in the long-term scenic resources along the rerouted section of the Stehekin Valley Road, the Selected Action would not impair scenic resources or the values for which they have been protected.

Wild and Scenic Rivers

The Stehekin River and its tributaries have been determined eligible for, but have not been designated as part of the Wild and Scenic Rivers System. The Selected Action would have minor beneficial effects from the creation of the Lower Valley Trail and its connection to the Stehekin River Trail. There would also be negligible to minor beneficial effects on historic resources from restoration at Buckner. The designation of some additional camps and a river access point would have minor beneficial effects on recreational values, similarly, there would be negligible to minor adverse effects from placement of additional barbs or logjams where the road needs to be maintained near steep sections. There would be no effect on the following outstandingly remarkable values: prehistoric resources, geology, scenic resources, wildlife or fish. The Stehekin River would continue to be free flowing with unobtrusive and short impediments to river flow and would continue to possess more than one outstandingly remarkable value. Because there would be no effect on the ability of the Segment 1 portion of the Stehekin River to be designated as a wild and scenic river for recreation, the Selected Action would have no adverse effect on and would not impair the wild and scenic river characteristics of the Stehekin River or the values that have made it eligible for nomination / listing.

Conclusion

Because there would be no significant adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the park's establishing legislation, (2) key to the natural or cultural integrity of the park or to opportunities for the enjoyment of the park, or (3) identified as a goal in the park's *General Management Plan* or other relevant National Park Service planning documents, there would be no impairment of park resources and values from implementing the Selected Action as identified in the Record of Decision for the Stehekin River Corridor Implementation Plan.