

Finding of No Significant Impact

Upper Stehekin Valley Road

Car Wash Falls (MP 12.9) to Cottonwood Camp (MP 22.8)

North Cascades NPS Complex

Summary

Record flooding of the Stehekin River in 1995 and again in 2003 caused severe damage to the upper Stehekin Valley Road. The road provides access to Stephen Mather Wilderness trailheads and North Cascades National Park from the Lake Chelan National Recreation Area, and bisects the Wilderness. The Stehekin River carries large volumes of water during high flow, and there have been several other large floods in recent years (e.g. 1989, 1990, and 1997) that have caused erosion of the roadbed.

The area of consideration is a 9.9-mile section of the upper Stehekin Valley Road between Car Wash Falls (milepost 12.9) and Cottonwood Camp (milepost 22.8) surrounded by the Stephen Mather Wilderness (Figure 1). The 1995 flood made the road impassable to vehicles from Glory (milepost 20.1) to the end of the road at Cottonwood Camp. The road between Car Wash Falls and Glory was reconstructed and reopened in 1996.

In October 2003, a record 500-year flood severely damaged sections of the road between Car Wash Falls and milepost 15.3 near Bridge Creek. Sections of road were either completely removed or filled with woody debris and sediment. A large landslide, which remains active, occurred at milepost 15. In several areas, the floodwaters completely washed away the large rock underlying the roadbed.

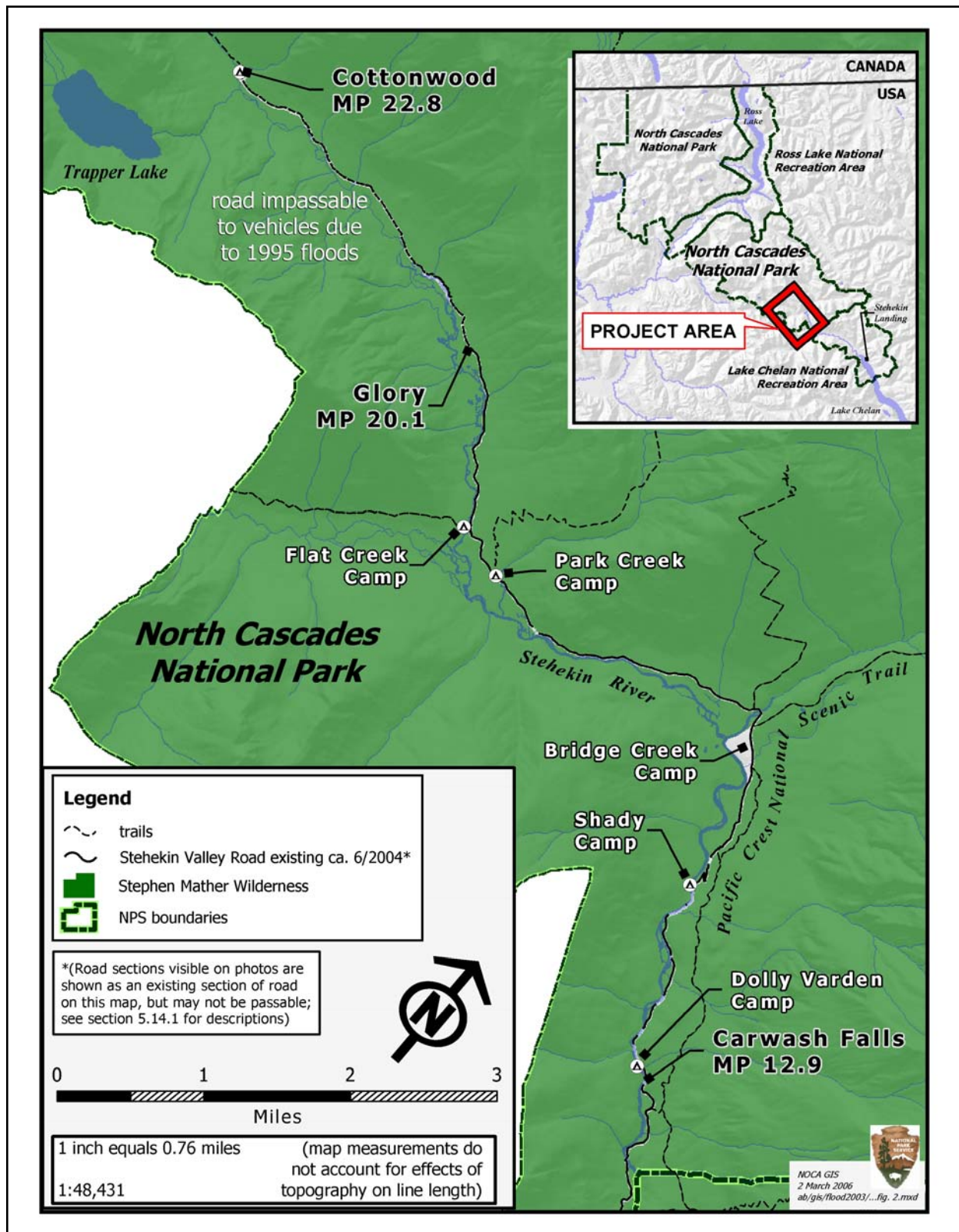
The 2003 flood made the road impassable to vehicles, cyclists, and stock from Car Wash Falls to milepost 15.3. There is challenging but safe passage for experienced hikers and cyclists to walk and pack their gear around the washed out sections at low flow times of the year. An active landslide at milepost 15 has completely removed about 200 of the former road. The NPS has constructed a temporary bypass trail for hikers to safely get around the slide and continue hiking on the road. Many hikers and stock users, however, are avoiding the flood-damaged road between Car Wash Falls and Bridge Creek and using the Pacific Crest Trail.

This Finding of No Significant Impact documents the Decision of the National Park Service (NPS) to officially close 9.9 miles of the Upper Stehekin Valley Road from Car Wash Falls to Cottonwood. The road between mileposts 12.9 (Car Wash Falls) and 15.3 (near Bridge Creek) will be decommissioned and partially rehabilitated. The road between milepost 15.3 and Cottonwood Camp (milepost 22.8) will continue to be maintained as a non-motorized, non-mechanized trail. The road rehabilitation will begin this season and should be completed by the beginning of the 2007 summer season.

Purpose and Need

The purpose of the proposed action is to define the nature and extent of future public and administrative access to the upper Stehekin Valley from Car Wash Falls to Cottonwood Camp. Although the 1995 Lake Chelan National Recreation Area General Management Plan calls for retaining vehicle access to Cottonwood Camp, the nature and extent of the damage makes access problematic. Furthermore, the constraints of the Washington Parks Wilderness Act (Public Law 100-668) compound the problem of retaining motorized access.

Figure 1. Project Area



Management Alternative Selected for Implementation

Of the four alternatives analyzed in the Environmental Assessment (EA), the NPS' preferred alternative (Alternative B) will be implemented to: (1) address the flood damage on the Stehekin Valley Road between Car Wash Falls and Cottonwood Camp, (2) provide visitor access to the Wilderness, and (3) protect natural resources. This alternative is unchanged from the description that appeared in the EA.

This action will officially close the Stehekin Valley Road to all motorized and mechanized use at the current physical termination (the washed out section) just downstream of Car Wash Falls, approximately 12.9 miles from the Stehekin Landing on Lake Chelan, and remove it from the NPS road and trail system.

Road closure and rehabilitation may render the 100-foot wide non-wilderness road corridor above milepost 12.9 eligible for wilderness designation in the future. Wilderness designation will require a formal Wilderness Study with public involvement including preparation of an Environmental Impact Statement. Congress would then need to pass legislation authorizing wilderness designation. Pursuit of wilderness designation is not proposed at this time.

A new foot, stock, and cross-country ski trail that utilizes existing sections of the Pacific Crest Trail (PCT) and the former Upper Stehekin Valley Road will be officially designated between Car Wash Falls and Cottonwood Camp. The new trail will begin at the new Car Wash Falls trailhead parking area and connect with the PCT at milepost 12.7 (0.2 miles south of Car Wash Falls). A turnaround and parking area for approximately six passenger vehicles up to the size of a 12-passenger shuttle van will be provided at the end of the road to access the PCT at milepost 12.7.

At Bridge Creek (milepost 15.9), the new trail will leave the PCT, and follow the old Stehekin Valley Road to Glory (milepost 20.1). At Glory, the new trail will join a ½-mile long section of trail that was built above the 100-year floodplain between mileposts 20.3 and 20.8 after the 1995 flood. The new trail connects to the remaining 2 miles of road to Cottonwood Camp.

There will be no motorized or mechanized access to Dolly Varden, Shady, Bridge Creek, Park Creek, Flat Creek, Glory, and Cottonwood camps. A 0.1-mile long spur trail will be built between the PCT and Shady Camp to provide hiker access. The other camps will be available to hikers and/or stock users as they have been since 2003 or 1995.

Road-related debris and culverts from the former road between Car Wash Falls and the landslide at milepost 15 will be removed. This includes a block of concrete and steel at Car Wash Falls, three 4-foot diameter culverts, one 3-foot diameter culvert, two 18 to 24-inch diameter culverts, and the bolts used to secure the subgrade rock to bedrock and boulders.

The estimated cost of road rehabilitation in this alternative is \$19,340. The former road between milepost 20.8 and Cottonwood Camp (milepost 22.8) will continue to be maintained as a non-motorized, non-mechanized trail as it has been since the 2003 and 1995 floods.

Environmentally Preferred Alternative

The Environmentally Preferred Alternative is the alternative that causes the least damage to the biological and physical environment. It is also the alternative which best protects, preserves and enhances historic, cultural and natural resources. The selected alternative (Alternative B) is the environmentally preferred alternative because it will cause the least damage to the biological and physical environment when compared to the other alternatives. Alternative A (No Action) would leave remnants of the road infrastructure (e.g. culverts) in place. Over time, these materials would adversely impact drainage along the former roadbed, leading to further instability and increased sedimentation. These materials would also be unsightly. Alternative C (reconstruct the road) would cause substantial adverse impacts to the environment, especially to the Stehekin River and its floodplain. Alternative D (relocate the road) cause various adverse impacts to vegetation and wildlife, including harm to spotted owl habitat.

Mitigation Measures

Mitigation measures and Best Management Practices (BMP's) are intended to lessen the impact of management actions on the environment and the visitor. The following mitigation measures and BMP's will be employed during the road restoration:

- Prior to clearing and grading in the Car Wash Falls (milepost 12.9) parking area, the areas to be cleared will be clearly marked on the ground to minimize soil disturbance. Only those areas necessary for construction will be cleared and grubbed, and ground-disturbing activities will be restricted to non-saturated soil areas. Responsible Divisions: Maintenance and Resource Management
- The culverts along the old Stehekin Valley Road will be cut into manageable sections with a cutting torch, crushed, and either sling-loaded by helicopter or packed out of the area. Responsible Division: Maintenance
- Construction will occur during low flow, between mid to late July and October 1, to work "in the dry" and protect potential bull trout and westslope cutthroat trout habitat. Responsible Division: Maintenance
- The areas where culverts are removed would be recontoured to achieve a natural appearance, and streambeds will be restored to natural grade to prevent erosion. Responsible Division: Maintenance and Resource Management
- Revegetation, mulching, woody debris, or rock will be used on the side slopes to minimize fill erosion following culvert removal. Disturbed areas will be seeded or replanted with a mixture of NPS approved native grasses, forbs, and/or shrubs suitable for the site to meet erosion control needs and other management objectives such as riparian or wetland habitat restoration. Certified weed-free mulch could be used to retain soil and moisture, and facilitate seed germination and survival. Responsible Divisions: Maintenance and Resource Management
- The concrete slab at Car Wash Falls will be winched over rock at low river flow to the end of the road at Car Wash Falls and trucked out of the area. Responsible Division: Maintenance
- The NPS will conduct additional threatened, endangered, and sensitive plant surveys as needed prior to project implementation. Populations or individual threatened, endangered, or sensitive plants (if found) will be flagged and avoided. Responsible Division: Resource Management
- Any previously surveyed archaeological and historical sites would be flagged and avoided. Responsible Divisions: Maintenance and Resource Management
- In the event of unanticipated discoveries of archaeological or historical resources are made during project implementation, all activities would cease until the NPS archaeologist can evaluate the finding and determine whether or not activities could continue. If significant properties are discovered, consultation with the State Historic Preservation Office would be conducted and clearance received prior to project implementation. Responsible Divisions: Maintenance and Resource Management
- As needed, the NPS will use News Releases and other media to notify visitors of construction related closures, delays, and hazards. Responsible Division: Interpretation
- Rehabilitation work will be limited to daylight hours. Responsible Division: Maintenance
- Soundscape mitigation will be used to minimize or eliminate the impacts of noise, if needed. Responsible Division: Maintenance

Other Management Alternatives Considered in the EA

Management Alternative A. No Action Alternative

This “No Action” alternative is required by NPS policies as a means for comparing the impacts of other “action” alternatives against a common baseline. This alternative provides a basis for comparing the existing condition with the four action alternatives and their anticipated environmental consequences. As such, the no action alternative represents the current condition and management of the roads, trails, and recreation sites within the project area, including the current trail reroutes, the washed-out and impassable sections of the Stehekin Valley Road between Car Wash Falls (milepost 12.9) and Cottonwood Camp (milepost 22.8), and existing backcountry Dolly Varden and Shady camps.

The *Coon Run Project* restored vehicle access to the parking area/turnaround at Car Wash Falls in the fall of 2005. Car Wash Falls to milepost 15.3 has remained impassable to vehicles, cyclists, and stock and unsafe for hikers at high flows. There is challenging but safe passage for experienced hikers to walk and pack their gear around the washed out sections at low flow times of the year. There is a temporary reroute around the landslide at milepost 15. Hikers and stock users can also use the PCT to access other park trails and the Wilderness.

The 2003 flood also left the road between Bridge Creek (milepost 15.9) and Glory (milepost 20.1) inaccessible to motorized vehicles.

A ½-mile long section of the 2.5-mile long road between Glory and Cottonwood Camp (milepost 20.1 to 22.8) washed out in the 1995 flood. Since 1995, the NPS built a non-motorized, non-mechanized trail around the wash out and converted the remaining 2 miles of road to a 6-foot wide trail.

Dolly Varden Camp (milepost 13) was badly damaged by the 2003 flood, and there is only one campsite remaining. Shady Camp (milepost 14.6) did not have any significant flood damage in 2003; there was some sediment and debris deposition in the single-site campground.

This alternative would not include any reconstruction, future maintenance, active rehabilitation, or closure of the Stehekin Valley Road between Car Wash Falls and Cottonwood Camp, or of Dolly Varden and Shady camps. The road would continue to be signed “impassable” and “closed” for motorized vehicles and cyclists above milepost 12.9 (Car Wash Falls). The road between Car Wash Falls and milepost 15.3 (near Bridge Creek) would be allowed to continue deteriorating and “closing itself” as the result of periodic flooding and/or mass wasting, and only experienced hikers could continue to use this section of the road.

Hikers, stock users, and cross-country skiers could continue to use the road between milepost 15.3 and Glory, the PCT, and the designated trail reroute between Glory and Cottonwood Camp. The road between milepost 15.3 and Glory, and the trail between Glory and Cottonwood Camp would receive routine maintenance for these non-motorized uses, but no reconstruction.

There would be no costs associated with implementing this alternative. The former road between milepost 15.3 and Cottonwood Camp (milepost 22.8) would continue to be maintained as a non-motorized, non-mechanized trail as it has been since the 2003 and 1995 floods.

Management Alternative C. Reconstruct the Stehekin Valley Road from Car Wash Falls to Glory

This alternative would rebuild the Stehekin Valley Road from Car Wash Falls (milepost 12.9) to Glory (milepost 20.1) in approximately the same location and to 100-year flood specifications as it was prior to the 2003 flood. The reconstructed road would accommodate high clearance, public and private passenger vehicles as large as a 12-passenger van.

The 2.7-mile long section of road between Glory and Cottonwood Camp (milepost 22.8) that was damaged in the 1995 flood would not be rebuilt. Motorized and mechanized access would not be reestablished between Glory and Cottonwood Camp.

Monitoring of the old roadbed between Glory and Cottonwood Camp as per the Flat Creek to Cottonwood Camp EA (NPS 1997) would cease. There would be no further consideration of reestablishing this section of road.

Motorized or mechanized access to Dolly Varden, Shady, Bridge Creek, Park Creek, and Flat Creek camps would be reestablished. Shady Camp (milepost 14.6) would need some post-flood maintenance.

The NPS could reconstruct Dolly Varden Camp to its former two-campsite capacity, if there is reasonable site potential. If this were impractical, consideration would be given to expansion of the Bridge Creek Camp so there is no net loss of backcountry campsite capacity.

Vehicle and bicycle access to the Glory turnaround and Cascade Pass Trailhead would be restored.

Hikers and stock users would continue to use the current trail between Glory and Cottonwood Camp, as in the no action alternative. Only hikers and stock users would be able to access to Cottonwood Camp, as they have since 1995.

In June 2006, the NOCA Geologist determined that continued slope instability at milepost 15 would make it impractical to attempt to reconstruct the road around the head of the slide. The slide is expected to stay active for the foreseeable future due to the destabilizing influence of several mid-slope springs, the granular, unconsolidated composition of the soil, the 50-foot tall, 55-90° head scarp above the springs, and the direct angle of attack by the river at the toe of the slope. There is still potential for mass failure due to the springs or undercutting by the river in future flood events. Currently the head scarp is within 20 feet of the Wilderness boundary. If the slide becomes stabilized at 35-40° slope (the anticipated angle of repose), then the landslide will extend well past the Wilderness boundary.

The road reconstruction in the alternative would be a multi-year (~3½ to 11 years) project that would cost an estimated \$6.6 million (or more) to implement. The current condition of the landslide at mile post 15 now renders this alternative infeasible because the road could not be reconstructed within the present non-wilderness corridor. Under this alternative, the estimated cost of routine, annual road and trail maintenance is \$10,368. Future flood damage would be likely, and the cost of reconstruction due to future flooding cannot be estimated.

Management Alternative D. Reroute the Stehekin Valley Road from Car Wash Falls to Bridge Creek and from Glory to Cottonwood Camp

This alternative would reroute the Stehekin Valley Road in two locations to avoid two washed out sections and allow heavy duty, high clearance public and private vehicle access from milepost 12.7 (0.2 miles south of Car Wash Falls) to Cottonwood Camp (milepost 22.8). A NPS or permittee shuttle service could be operated as far as Cottonwood Camp in the future.

From milepost 12.7 to milepost 15.3 (0.6 miles south of Bridge Creek) the road would follow the approximate location of the current PCT. The PCT would be rerouted downslope of the road (closer to the river) and out of sight distance of the road, wherever practical. The new 12-foot wide road would be approximately 0.2 miles shorter than the segment it would replace. The road reroute would require congressional legislation to designate a new non-Wilderness road corridor in the Stephen Mather Wilderness.

From milepost 15.3 to milepost 20.1 the road was essentially undamaged by the 2003 flood, however, there was some damage at mileposts 17.4, 17.5 (Park Creek Camp), and 20.1 (Glory near Cascade Pass Trailhead). These sites would be reconstructed or repaired as needed.

The 2.7-miles of road between Glory and Cottonwood Camp (milepost 22.8) have been closed to motorized and mechanized travel since the 1995 flood. Approximately a ½-mile of road between milepost 20.3 and 20.8 would need to be rerouted out of the 100-year floodplain. The ½-mile road reroute would fall within the current Wilderness, and congressional legislation would be required to designate a new non-Wilderness road corridor in the Stephen Mather Wilderness. Approximately 2 miles

of road between milepost 20.8 and Cottonwood Camp is intact but would need drainage structure repairs.

The new road and trail system would be designated with a notice in the *Federal Register* and Park signs.

The former Stehekin Valley Road between Car Wash Falls and milepost 15.3 would be removed from the NPS road and trail system. The non-Wilderness road corridor could be congressionally designated as Wilderness in the future.

This alternative would take two to three years to implement, and the estimated cost of implementation is \$1,339,075. Under this alternative, the estimated cost of routine, annual road and trail maintenance is \$13,968.

Alternatives Considered But Rejected

Close Stehekin Valley Road at Car Wash Falls (milepost 12.9) and Provide All Terrain Vehicle Access to Glory (milepost 20.1)

This alternative was proposed as a result of public scoping. The proponent suggested constructing a 60-inch tread trail from Car Wash Falls to Bridge Creek that could accommodate a narrow gauge “train” of cars with large, pneumatic tires pulled by a tractor that could carry up to 10 guests and their packs.

A designated All Terrain Vehicle (ATV) trail would also be open to hikers, stock, and bicycles. In a number of places, the 60-inch wide trail would have to be located against a rock face over the river, and unacceptable safety issues could arise between motorized and non-motorized users.

Construction of an ATV trail in this location would require substantial rockwork and some blasting, similar to new road construction. All fill material would need to be barged into Stehekin from a certified, weed-free source.

Current use patterns indicate that most visitors who use the Stehekin Road travel to the High Bridge Historic District (milepost 11.2) by vehicle or bicycle before returning to Stehekin. Use of the proposed ATV trail would be limited, and would primarily benefit local permittees who would transport tourists or rent ATVs to the recreating public.

Building an ATV trail within the non-Wilderness boundary near milepost 15 would be a short-term solution because the landslide mass wasting potential extends beyond the non-Wilderness road corridor established for the Stehekin Valley Road. Therefore, a new non-Wilderness road corridor would need to be designated by congressional legislation to establish a long-term, safe ATV, hiker, stock, and bicycle trail.

The estimated cost of this alternative is \$4,950,000, or 75 percent of the road reconstruction estimate in Alternative C. Maintenance costs of an ATV trail would be similar to the cost of maintaining a road.

Close Stehekin Valley Road at Car Wash Falls (milepost 12.9) and Provide Bicycle Access to Glory (milepost 20.1)

This alternative would permanently close the Stehekin Valley Road to motorized use between Car Wash Falls and Cottonwood Camp. In addition, this alternative would make improvements to the Stehekin Valley Road between Car Wash Falls and milepost 15.3 to provide hiker and cyclist access as far as Glory if the bicycle route could be accommodated and maintained within the non-Wilderness road corridor.

The Washington Park Wilderness Act of 1988 (Public Law 100-668) defines the Wilderness boundary as 50 feet from either side of the centerline of the road as it existed at the time of the bill’s passage. By law, the use of mechanical or motorized conveyances is limited to this 100-foot wide corridor.

Building a foot and bicycle trail within the non-Wilderness boundary near milepost 15 would be a short-term solution because the landslide mass wasting potential extends beyond the non-Wilderness road

corridor established for the Stehekin Valley Road. Therefore, a new non-Wilderness road corridor would need to be designated by congressional legislation to establish a long-term, safe bicycle trail.

Public Review

The National Park Service on February 8, 2005 mailed a public scoping letter describing the purpose and need for action on the Stehekin Valley Road to various members of the general public and representatives of local, state, tribal, and federal government, agencies, and organizations. The NPS received 52 responses (letters, e-mails, phone calls) to the public scoping. Every public comment received in response to this initial scoping effort was considered when developing this EA.

The EA was released for a 60-day public comment period on March 29, 2006. The NPS established a 60-day timeframe for public review (as opposed to a standard 30-day period) because the EA was a lengthy, detailed document and extra time was needed for public review and comment. The EA was mailed to approximately 200 parties. Additional copies of the EA were made available at Park headquarters in Sedro-Woolley and at the Golden West Visitor Center in Stehekin. The EA was also sent to several area libraries including the Bellingham Public Library, the Chelan Community Library, East Wenatchee Community Library, Mount Vernon City Library, and Seattle Central Public Library. The EA was also available online for review and downloading at the NPS' Planning, Environment and Public Comment web site: <http://parkplanning.nps.gov/noca>.

The NPS issued news releases to notify the public that the review draft is available if they wished to receive a copy. The Lake Chelan Mirror on April 5, 2006 published a copy of the News Release. Several other area newspapers including the Seattle Times and the Wenatchee World published articles and Op-Ed pieces.

The NPS convened three public briefing meetings between April 25-27, 2006 to summarize the EA and answer questions about the proposed project. The briefings were held at the following locations:

1. Stehekin Community Building, Stehekin, WA (25 attendees),
2. Campbell's Resort, 104 W Woodin St., Chelan, WA 98816 (6 attendees), and
3. Mountaineers Building, 300 Third Ave West, Seattle, WA 98119 (8 attendees).

Two hundred and sixty public comment letters on the EA were received. None of the comment letters identified additional substantive issues, reasonable management alternatives or potentially significant impacts that would require a new EA or preparation of an Environmental Impact Statement. Interest Groups and agency commenters included Stehekin Heritage; North Cascades Conservation Council; The Wilderness Society; American Rivers; The Pacific Crest Trail Association; National Parks Conservation Association; the Wenatchee Valley Transportation Council; the Port of Chelan County; Washington State Representative Cary Condotta; Washington State Senator Linda Evans Parlette; and the U.S. Fish and Wildlife Service. Substantive comments requiring an agency response and/or editorial clarification or corrections are documented in an Errata prepared as a technical attachment to the EA.

Agency Consultation

U.S. Fish and Wildlife Service (FWS)

An assessment of potential impacts to federally listed species was included in the EA. The NPS determined that the management alternative selected for implementation would have "No Effect" on the Endangered Species Act (ESA) listed fish, plant, and wildlife species, minor long-term beneficial affects. Consultation with USFWS is not required for "No Effect" determinations.

A copy of the EA was provided to the FWS during the public comment period. In their general comments on the EA, the USFWS stated, “The USFWS enthusiastically supports NOCA’s preferred alternative. We believe closing the road at Carwash Falls is the best option for protecting fish and wildlife resources, maintaining reasonable visitor access, and spending public funds wisely. In addition to avoiding deleterious construction impacts, this option will allow river processes to occur naturally in the future, as there will be no streamside road that might prompt river control efforts. Consequently aquatic habitat and riparian conditions will develop without interference.”

State Historic Preservation Officer and the Tribes

The selected alternative will not affect potentially important historic elements. Bridge Creek has two structures listed on the National Register of Historic Places. Bridge Creek Cabin-Ranger Station and Bridge Creek Shelter. There are also two candidate Cultural Landscapes. Bridge Creek Ranger Station and Campground, and Bridge Creek Sawmill Site. Bridge Creek Camp has facilities for stock, and all of the alternatives would provide either motorized or non-motorized access to Bridge Creek. Since the 2003 flood damage, permittees are offering or proposing to offer food and overnight accommodations (hostel-style cabin tents) to hikers and stock users at Bridge Creek.

Sixteen prehistoric sites have been documented in the Lake Chelan National Recreation Area, including a Bridge Creek site, and there is potential for more prehistoric sites in the project area. Although the project area contains historic sites, historic structures, and prehistoric sites, the mitigation measures defined for the proposed action would ensure that no impacts would occur to archeological and historical resources and historic structures. In light of these considerations, impacts to cultural resources were dismissed from detailed analysis in the EA, and consultation was not pursued with the State Historic Preservation Officer or the Tribes. However, the Washington State Historic Preservation Office and the Colville Tribal Historic Preservation Office were contacted during initial public scoping; no comments were received. These offices received a copy of the EA. Should culturally significant resources be discovered during construction, work will cease pending further evaluation of cultural significance in consultation with appropriate agencies and the Tribes.

No specific ethnographic resources such as human remains, funerary objects, sacred objects, or cultural patrimony objects have been identified in the project area in consultation with the Tribes. Even so, NPS will continue to consult and coordinate the proposed action with affected Tribes. If the Tribes identify any ethnographic resources or ethnographic resources are discovered during construction, appropriate mitigation measures would be taken including consultation with the Tribes and the State Historic Preservation Office.

Why the Selected Alternative will not have a Significant Effect

- The Stehekin River will remain free-flowing and the closed road between Car Wash Falls and milepost 15.3 will continue to deteriorate through erosion, washouts, and mass wasting (i.e. landsliding). The closed road will naturally revegetate; and the landslide at milepost 15 will continue to grow until it eventually reaches a stable angle of repose.
- The periodic flood damage, erosion, emergency road repairs, reroutes, and the floodplain/riparian area filling associated with the previous road will permanently cease.
- Revegetation of the former roadbed will increase sediment filtering and soil infiltration over time. Road maintenance in response to periodic flood damage will cease, eliminating the sediment transport, floodplain filling, and the channel morphology changes associated with erosion of the former road.
- The former 12-foot wide roadbed from milepost 15.3 to Glory will be maintained as a 6-foot wide trail as it has been since 2003. The rest of the roadbed will revegetate naturally.

- Hikers and stock users will continue to use the trail between Glory and Cottonwood Camp that was built after the 1995 flood.
- The small amount of foot and stock traffic that used the Upper Stehekin Valley Road prior to the 2003 flood has been rerouted to the PCT at milepost 12.7. Since the majority of visitors used the PCT prior to the flood, any post-2003 affects are considered negligible.
- The culverts between milepost 12.9 and 15.3 will be removed to prevent future water quality and aquatic habitat impacts (turbidity and sedimentation) due to plugging and erosion. Other road debris will be removed to improve the wilderness character of this section.
- “No effect” on Columbia River bull trout because bull trout are believed extirpated from the Stehekin River Watershed, and there is no proposed or designated bull trout critical habitat on the east side of the Cascades.
- “No effect” on ESA listed plants because there are no known individuals or populations in the project area.
- “No effect” on the ESA listed terrestrial and amphibious wildlife species that use the project area or have potential habitat in the project area (gray wolf, grizzly bear, Canada lynx, bald eagle, northern spotted owl) due to one or more of the following factors: (1) short implementation time, (2) lack of current occupancy, (3) proposed mitigations, (4) the availability of high quality, extensive foraging, denning, and/or nesting habitat and travel corridors outside the action area, and/or (5) lack of suitable foraging and nesting habitat in the action area.
- Post-project, the selected alternative will provide minor, long-term beneficial affects for the ESA listed terrestrial and amphibious wildlife species because road-related mortality, noise, and human activity will not occur, and wilderness character will be enhanced within the Stehekin River corridor.
- No net loss of core a grizzly bear habitat.
- The common native, riparian, and wetland communities will be able to reestablish themselves, improve floodplain function and increase large woody debris recruitment potential along the Stehekin River from Car Wash Falls to milepost 15.3 and from Glory to Cottonwood Camp.
- The upper road segments will cease to be an avenue for proliferation of knapweed and other noxious and invasive plant by vehicles, hikers, stock, bicycles, water transport, and road maintenance gravel.
- Natural floodplain, riparian area, and 9.9 miles of road reclamation within the river corridor will have minor to moderate, long-term beneficial effects for common and special status terrestrial and amphibious wildlife that utilize the Stehekin River corridor for all or part of their life cycle, or for seasonal or diurnal movements.
- Cyclists will continue to have access to High Bridge Historic District; hikers and stock users will continue to have access to the Wilderness and PCT. These are the most commonly used routes for these user groups.
- The selected Alternative will have no direct effect on the PCT, and only a negligible effect on PCT use. There will be negligible to minor beneficial affects on facilities used in conjunction with the PCT because the parking area at Car Wash Falls will be enlarged and there will be better access to Shady Camp.
- Future opportunities for a shuttle service to Car Wash Falls or High Bridge will be maintained.
- The permanent loss of motorized access and shuttle service to the PCT trailhead at Bridge Creek will have be minor to moderate, adverse affects on visitors. The new permittee services at Bridge Creek will continue to compensate for the loss of motorized access, as they have since 2004.
- The wilderness character of the Stehekin River corridor will increase. Visitors who desire increased wilderness character, solitude, primitiveness, naturalness, and remoteness will perceive these changes as moderate to major, long-term beneficial affects.

- The Stehekin River's potential for Wild and Scenic River designation will be maintained and 9.9 miles of the river's free-flowing character and Outstanding and Remarkable Values will be improved with road closure and rehabilitation.
- The individuals, primarily local Stehekin residents, who desire continued vehicle access to southern portions of the Wilderness will perceive implementation of this alternative as a moderate to major, long-term adverse affect.
- Air quality will improve in the vicinity of the river above Car Wash Falls during the peak visitor seasons because there will be no dust or exhaust generated by privately-owned, Park, or shuttle vehicles, routine road maintenance, or road reconstruction between mileposts 12.9 and 22.8.
- There may be minor, short-term adverse affects (noise, dust, exhaust, traffic) on visitors if a helicopter or large truck is used to remove the culverts and other material during reclamation of the road.
- The permanent loss of 10 miles of road (at the edge of the Wilderness) would have a negligible, long-term adverse affect to various NPS operations that require motorized access for administrative purposes.
- The area above Car Wash Falls will be unroaded and there will be no need for routine maintenance or emergency road repairs above milepost 12.9. This will have major, long-term beneficial affects on the park operating budget.
- Effects to local businesses will be either adverse or beneficial, depending on whether the businesses offered motorized or non-motorized services for visitors, or had adjusted their concessions to meet changing visitor needs since the flood of 2003.
- This decision does not trigger other significance criteria used by the President's Council of Environmental Quality, including:
 - Public health and safety are not compromised;
 - No unique characteristics or ecological critical areas in the geographic area are impacted;
 - The potential effects to the quality of the human environment are not highly controversial;
 - There are no significant indirect or cumulative effects or connected actions foreseen;
 - No unique or unknown consequences or uncertain effects will occur; and
 - No violation of federal, state, or local law will result from implementing the selected alternative.

Impairment

The impacts resulting from the selected alternative will not impair park or NRA resources necessary to fulfill specific purposes identified in the enabling legislation. The impacts documented in the EA as summarized above will not affect resources or values key to the natural or cultural integrity of the recreation area or alter opportunities for enjoyment of the recreation area. The alternatives will not violate the NPS organic Act.

Conclusion

Based on information contained in the EA as summarized above, the NPS has determined that the proposed actions do not constitute a major federal action that would significantly affect the quality of the human environment. This determination is based upon the environmental analysis, the ability of the mitigation measures to reduce or eliminate impact, and the favorable nature of public comment on this project. The proposed action is not without precedent, nor is similar to an action, which normally requires an environmental impact statement. Therefore, in accordance with the National Environmental

Policy Act of 1969 and regulations of the Council on Environmental Quality (40 CFR 1508.9), an environmental impact statement will not be prepared. This project will serve to ensure the long-term enjoyment of the Upper Stehekin River, the Stephen Mather Wilderness, and other features of the North Cascades National Park by visitors with minimal adverse impacts on the human environment. Management actions will begin this season and should be completed by next summer.

Recommended: _____
William F. Paleck
Superintendent, North Cascades NPS Complex
Date

Approved: _____
Jonathan B. Jarvis
Regional Director, Pacific-West Region
Date

Errata

Introduction

These Errata are based upon public comments received during the 60-day public comment period for public review (March 29-May 27, 2006). These Errata should be attached to the Upper Stehekin Valley Road Car Wash Falls (MP 12.9) to Cottonwood Camp (MP 22.8) Environmental Assessment (EA) to form the complete administrative record.

Several comments pointed out that certain laws and policies relevant to this decision were not adequately disclosed in the EA. These include the Americans with Disabilities Act, the National Trails System Act, and sections of the Sand Rock and Gravel Plan (a component of the General Management Plan) for Lake Chelan NRA that establish park-specific policies for protecting the road from the flooding.

Americans with Disabilities Act

Section 507 (c) of the Americans with Disabilities Act is the only section that pertains to the executive branch of the federal government. That section reaffirms several key requirements of the Wilderness Act including: (1) allowing disabled individuals to use wheelchairs (or other human-powered mechanical devices) in federally-designated wilderness, and (2) not requiring agencies to provide any form of special treatment or accommodation, or to modify any conditions of lands within a wilderness area in order to facilitate such use. Instead of the ADA, the executive branch of government must follow the Rehabilitation Act of 1973, which prohibits discrimination in services and employment on the basis of a handicap. Federal regulations (43 CFR part 17, subpart E) clarify this law by stating that agencies are not required to take any actions or provide access that would (a) result in a fundamental alteration in the nature of a program or activity; or (b) cause undue financial and administrative burdens.

The National Trails System Act

The National Trails System Act, as amended (16 U.S.C. 1241–1251) established the Pacific Crest National Scenic Trail in 1968. National scenic trails are defined as extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass. They are located so as to represent features which exhibit significant characteristics of the physiographic regions of the nation. Section 1246 (b) (i) states the Secretary of the Interior may relocate segments of a national scenic trail with the concurrence of the National Park Service Director, upon a determination that the relocation is necessary to preserve the purposes for which the trail was established.

Sand Rock and Gravel Plan for Lake Chelan NRA

The 1995 General Management Plan (GMP) for Lake Chelan NRA established limits on use of rock and gravel derived from NPS land, and established specific criteria the NPS would use to protect the public road system in the Stehekin Valley from flood damages. This information was not presented in the Relevant Laws and Policies section of the EA. This oversight confused reviewers, and may have prompted commenters to question why the NPS would import thousands of cubic yards of fill into the Valley to reconstruct the road, when massive quantities of rock appear to be readily available for use. In response to a court mediated Consent Decree, the Sand, Rock and Gravel Plan evaluated the potential need for large quantities of fill materials for road maintenance purposes, and established a policy of allowing limited quantities of sand, rock, and gravel to be mined in the valley solely at the Company Creek Pit. No new borrow sites are allowed. The superintendent does have the authority to exceed limits on rock mining in the event of a major emergency such as a major flood, but the actions related to this decision do not constitute an emergency.

Public Comment and Response Report

The following Table provides a detailed description and analysis of all 260 public comments received on the subject EA. Comments of a similar nature were coded and consolidated into “concern statements” to facilitate review. Representative quotes from the original correspondence for each concern statement are included so the reviewer could further understand the original intent of the comments received. When appropriate, responses to the concern statements are provided.

AL3001. Alternatives: Environmentally Preferred Alternative should be Alternative D not B

Concern Statement: One comment stated that Environmentally Preferred Alternative should be Alternative D not B given the 1988 General Management Plan for North Cascades Complex and the stated policy of maintaining the 23-mile Stehekin Valley road to Cottonwood.

Representative Quote:

- “If you approach this issue with the intent of abiding by the Management Plan, then Alternative D has the least environmental impact. The choice you have made appears to be one of administrative and budget convenience rather than honoring the Park Plan and environmental choices.”

Response: NPS policies state that the Environmentally Preferred Alternative is the alternative that causes the least damage to the biological and physical environment. It is also the alternative which best protects, preserves and enhances historic, cultural and natural resources. As described on pp. 56 and 57 of the Environmental Assessment and in the Finding of No Significant Impact, Alternative B is the environmentally preferred alternative because it will clearly cause the least damage to the biological and physical environment when compared to the other alternatives.

AL3102. Alternative A (No Action)—Oppose

Concern Statement: Nine comments stated that Alternative A is not the valid “No Action” alternative. Instead, the true “No Action” alternative should be to adhere to the policy of maintaining the road as articulated in the 1988 General Management Plan.

Representative Quote:

- “The true “no action” alternative is to leave the Park Management Plan unchanged, and fulfill the duty contained in that plan to maintain and preserve the road.”

Response: The President’s Council on Environmental Quality (CEQ) in its Forty Most Asked Questions Concerning National Environmental Policy Act Regulations (Question #3) provides explicit guidance on this point. CEQ has two distinct interpretations of “no action” alternatives: (1) “No Action” in the context of general management planning proposals; and (2) “No Action” in the context of specific project proposals. This EA clearly falls under CEQ’s second interpretation of the “No Action” alternative because it involves a federal decision on a specific project proposal as opposed to proposed changes to a general planning document such as a General Management Plan. In this case, “No Action” means exactly what is stated in the Environmental Assessment’s “No Action” Alternative: “The NPS would respond to future needs and conditions without major actions or changes in the present course.”

AL3200. Alternative B (Preferred Alternative)—Support

Concern Statement: Thirty three comments expressed support for Alternative B (Permanently Close the Stehekin Valley Road Above Car Wash Falls) for various reasons including, but not limited to, preserving the Stephen Mather Wilderness and minimizing adverse ecological impacts. Several of the comments also supported road closure because it would not substantially impact recreational access for most visitors, and/or the environmental benefits of road closure would be substantially greater than adverse impacts to visitor use.

Representative Quote(s):

- "...I see this most importantly as an issue about wilderness, about our society's willingness to continue to honor the ideas embodied in the 1964 [Wilderness] Act, all of which come back to our willingness, at least in this place called "wilderness", to restrain our urge to alter nature, to build and to mechanize. What a shame it would be (and how long remembered) if a precedent-setting boundary change to build a road took place in the Stephen Mather Wilderness. I hope to never see it. I appreciate the wisdom as well as the common sense in the National Park service's stated preference for Alternative B. Please let it stand."
- "Closing the road would not inhibit access because it is very pleasant and easy walking for any healthy man, woman or child anywhere in the valley. As an example, in 2004 and again in 2005 my children hiked with me from the Landing to Bridge Creek and back during three days of our spring break. In 2000 we hiked from Bridge Creek to Cottonwood and back, including a side trip to the end of the Flat Creek Trail, over a period of several days. My daughter was three years old. These trips were challenging but not overly difficult for them. I have leisurely and comfortably walked from the landing to Cottonwood in less than two days though I am not exceptional in any way. To say that removing the road beyond Carwash Falls cuts off part of the valley to park visitors is simply not true."

AL3202. Alternative B (Preferred Alternative)—Visitors with limited time and/or physical abilities opposed to closure.

Concern Statement: Twenty comments expressed opposition to road closure because families with children, elderly, handicapped people or visitors with limited time will no longer be able to access the Upper Stehekin Valley without the upper road.

Representative Quote(s):

- "My wife was born in the Lake Chelan Valley and spent most of her "growing-up" summers in the Stehekin Valley. Today while we reside in San Diego, California region, we visit Stehekin each summer to expose our children, and soon to be grandchildren, to its natural beauty. We have been patiently waiting for the repairs to be made to the upper road so that we can again travel to the Cottonwood Camp area. I am a quadriplegic and am confined to a wheelchair. I wish to express to the Park Service my concern with the apparent attitude that citizens in my condition should not have our access preserved. Without the use of a vehicle, I have NO ACCESS to the upper valley area. For years that area was available and it is now only accessible to hikers; this seems highly discriminatory to me."
- "The loss of this road changes reasonable day trips into multi-day treks. It adds one to two days of travel to any time spent in the Upper Valley and effectively closes the area to all but the most fit or those with easy access from the west side, thus making this amazingly beautiful area into a playground for an elite few."

AL3300. Alternative C--Support

Concern Statement: Fifteen comments supported Alternative C primarily for reasons involving a perceived compromise between providing motorized access while keeping the upper end of the damaged road as trail.

Representative Quote(s): "I conclude option C. seems to be the most logical to me, thus restoring the road to a certain point to "Glory" from "Car Wash Falls" but leaving the road beyond to Cottonwood Camp accessible only by trail. This provides the many users access as well as recreation in the area, and retains the furthest most upper road section free from vehicle travel. A compromise I think, but a viable solution that meets the needs of the public and the environment."

AL3302. Alternative C--Oppose

Concern Statement: Twenty one comments opposed Alternative C for various reasons including, but

not limited to: (a) the high financial costs of rebuilding the road; (b) the adverse ecological impacts of road construction and maintenance; and (c) the limited number of people who would drive on the road.

Representative Quote(s):

- “Alternative C is an irresponsible choice both physically and financially. Physically, 70,000 cubic yards of riprap for a “temporary fix is a waste of natural resources. Financially \$6,600,000 is a GROSS waste of the American people’s hard earned money.
- “to bulldoze a new [road] through the area would be a mistake. It would be extremely expensive, of course, and the “ecological” price would be prohibitively high. It also could wash out, sooner or later. All roads require constant maintenance, lots of gravel, etc. especially in Stehekin. This is a waste in my eyes, considering how very few people actually use it, and how many good hiking and sight-seeing alternatives there are in the valley.”

AL3400. Alternative D—Support

Concern Statement: Thirty seven comments supported Alternative D for various reasons including protecting the natural processes of the Stehekin River and striking a balance between wilderness preservation and recreational access.

Representative Quote(s):

- “If we assume (and I do) that vehicular traffic to Cottonwood, or even Glory, is a good thing then a re-route would be more beneficial to the spirit of the wilderness than either the past practices or reconstruction of the old road. A re-route would leave the river to its natural geological development while allowing a greater portion of the riparian habitat to be undisturbed. Moving the road up the hillside would accomplish this while still allowing access to the river.”

AL3402. Alternative D--Oppose

Concern Statement: Nine comments opposed Alternative D for various reasons including, but not limited to cost, adverse ecological impacts, conflict with existing laws and policies, the adverse impacts to wilderness and the precedent that would be set should Congress amend the Washington Parks Wilderness Act of 1988 to allow road relocation. Several other comments indicated support for Alternative D out of the four alternatives presented in the EA, but these comments believed that a new alternative needed to be considered (see AL4000).

Representative Quote(s):

- “We are concerned that implementation of Alternative D would negatively affect the health of tributaries, fisheries and aquatic habitat. As noted in the EA, “major, long-term adverse impacts on the lower reaches of the Stehekin river tributaries and their associated floodplains, riparian wetlands, and old-growth cedar wetland.” Sedimentation, channel alteration, turbidity, scour and filling and loss of floodplain function will all result from the road reconstruction proposed in Alternative D. Additionally, road reconstruction would impair the wilderness character of the proposed area and have a negative impact on wildlife as a result of road-related incidents including wildlife mortality and avoidance of the area.”

AL4500. Alternatives: New Alternatives or Elements. Rebuild the road within the non-wilderness corridor but outside/above the floodplain and at much less cost than Alternative C.

Concern Statement: One hundred seventy eight comments rejected the four alternatives presented in the EA and recommended the NPS consider an additional, much less costly alternative “E” that would (a) rebuild the road within the existing non-wilderness corridor; (b) avoid critical washouts and unstable areas; (c) blast through cliffs and bedrock outcrops to raise the road above the floodplain; and (d) use the fill materials generated from blasting as opposed to importing the fill from outside of the valley.

Representative Quote(s):

- “I believe with local contractors we can re-establish the road with minimal impact and cost and keep the integrity of the wilderness corridor. I’d like to request a new EA that focuses on this much needed option”.
- “We consider the EA limited and divisive. We ask for a new EA and suggest an Alternative “E” which is based on permission granted through the General Management Plan of this area to keep the road open to Cottonwood Camp, through reasonable economic means and methods, and through corridors that are legally sound within the non-wilderness corridor.”

Response: The NPS agrees that it may be possible to reconstruct sections of the road out of the floodplain while remaining within the non-wilderness corridor. This could be done by blasting into bedrock and cliff bands as opposed to importing extensive amounts of fill and rebuilding the road exactly within its former location. This engineering approach, however, would cause a variety of potentially significant environmental impacts. In addition, it would not comply with the provisions of the Sand Rock and Gravel Plan, a component of the 1995 General Management Plan (GMP) for Lake Chelan NRA. The GMP evaluated the potential need for large quantities of fill materials for road maintenance purposes, and established a policy of allowing limited quantities of sand, rock, and gravel to be mined in the valley solely at the Company Creek Pit. No new borrow sites are allowed. The superintendent does have the authority to exceed limits on rock mining in the event of a major emergency such as a major flood, but this action is not an emergency. The primary problem with this proposed “Alternative E”, however, is not the GMP restrictions on use of rock and borrow sites in the valley. Instead, the active landslide at mile post 15, just upstream of Shady Campground renders this proposal infeasible.

The park geologist in June 2006 thoroughly evaluated the current condition and stability of the landslide to determine whether the road could be reconstructed. A detailed description of findings is provided in Attachment I. In summary, since spring 1995, the head of the landslide has continued to move upslope toward the Stephen Mather Wilderness boundary. Although the rate of lateral movement appears to have slowed, the distance to the Stephen Mather Wilderness boundary from the head-scarp (i.e. highest point) of the slide is now within 20 ft at its closest point. The slide has grown laterally and claimed approximately 200 ft of the former road, compared to only minor road shoulder loss immediately after the flood. The vicinity of the landslide will remain unstable for the foreseeable future due to several factors and forces including: (a) the unstable influence of a series of springs within the slide; (b) the granular, unconsolidated composition of the geologic material (glacial deposits) in the slide; (c) the highly unstable, 50 foot vertical head scarp above the springs, and the angle of attack of the river on the toe of the slope. Given these conditions, it was determined that the land mass at the head of the slide could fail without notice. Therefore, the NPS believes it would neither be safe or feasible to reconstruct the road either through or around the head of the landslide and still remain within the non-wilderness corridor.

In conclusion, given (1) the limits on rock use in the valley including the prohibition on establishing new borrow pits, and (2) the insurmountable barrier of landslide, and (3) the proximity of the Wilderness boundary, the proposed “Alternative E” is not feasible.

AL4010. Alternatives: New Alternatives or Elements. Allow bicycle use on former road.

Concern Statement: Three comments stated the NPS should engineer a trail and bridge network to accommodate bicycle use within the non-wilderness corridor of the former road.

Representative Quote(s):

- “Because bicycles will allow many people quiet, non-polluting access to upper road destinations and trailheads let’s put our creative minds together to solve the difficulties of bicycling over the washouts at Carwash Falls and the slump at Shady Camp...At Carwash, suspension bridges could be built to span the difficult scrambles there. At the Shady slump a

suspension bridge could be eventually built. Until the slump stabilizes itself, a cable loop could be installed to span the slump. It could be suspended on pulleys between posts. Cyclists would attach their bicycle to the lower cable then pull the upper cable to move their bicycle across the slump. Think of the pulley systems holding clotheslines between separate tenement buildings. Cyclists would walk around the slump to retrieve their bike.”

Response: The EA considered but dismissed an alternative that would allow bicycle use on the former road because there would be no safe way to build a trail around the landslide and remain within the non-wilderness corridor. This proposal offers a potential means of getting past the slide and around the cliff bands downstream of the slide (e.g. Carwash Falls) while remaining in the non-wilderness corridor using an innovative engineering approach including bridges and cables. The NPS has considered but rejected this expensive proposal due to lack of funding, safety concerns and general uncertainty as to whether the proposal would truly be feasible given the terrain constraints.

AL4020. Alternatives: New Alternatives or Elements. Build a spur trail from the proposed parking area below Carwash Falls to the PCT.

Concern Statement: One comment recommended the NPS build a spur trail directly from the proposed parking area below Carwash Falls to the Pacific Crest Trail (PCT). This spur trail is needed because the lack of direct access to the PCT from the parking area would encourage visitors to park directly at the intersection of the Stehekin Valley road (MP12.7) and the current spur trail to the PCT as opposed to the Carwash Falls parking area (MP12.9).

Representative Quote(s):

- “If there is no trail between Carwash and Shady, the parking area at the Carwash turnaround will be un-used or underused unless there is a spur trail directly from the parking area to the PCT.”

Response: The NPS has considered but rejected this proposal because the parking area at Carwash Falls is a logical terminus for the road given the close proximity to the river and previous disturbance to the site. In addition, the junction to the current PCT spur trail is a very short walk (0.2 miles) so access to the PCT is readily available.

AL4030. New Alternatives or Elements. Build more day-use trails in the lower valley.

Concern Statement: One comment stated if the NPS closes the upper road, then more day-use trails should be built in the lower valley to mitigate the loss of day-use opportunities.

Representative Quote(s):

- “I would like to see the park develop a more extensive day-use trail system in the Lower Stehekin valley. In particular, this should be part of any plan that involves closure of the upper valley road (i.e. to help offset loss of upper valley day-use options).”

Response: The NPS supports this proposal. The Transportation Plan component of the Lake Chelan GMP includes an 11-mile pedestrian and horseback trail from the Stehekin Landing to High Bridge. Several other smaller trails in the lower valley are also proposed. With all major flood-related damages resolved, the NPS will now have the personnel time and resources necessary to pursue development of these proposed trails.

AL4040. New Alternatives or Elements. Rebuild the road in wilderness only where absolutely necessary.

Concern Statement: One comment suggested reestablishing the road to Cottonwood by linking sections of the road that did not wash out with new sections of road constructed in wilderness only where absolutely necessary to avoid future washouts.

Representative Quote:

- “Another alternative to consider would be trading some wilderness, where absolutely necessary, with the land next to the river so the road could be moved away from the river. It

does not have to be done in its entirety—only where it makes fiscal sense. Let’s not spend our tax dollars on rebuilding exactly where it will wash out again. Let’s not spend our tax dollars completely rebuilding the road away from the river in places where it does not have a history of washing out. Instead, please consider moving the road where necessary, keeping it where it is when possible, and maintaining the original intent of Congress to allow vehicle access to Cottonwood Camp.

Response: The merits of this proposal were largely captured in Alternative D. Alternative D proposed to relocate the road in what is currently designated wilderness along the former wagon trail (now PCT) from Mile Post (MP) 12.7 to MP 15.3. From MP 15.3 to MP 20.3, the road was largely undamaged so Alternative D proposed to repair the road as opposed to relocating it in the Stephen Mather Wilderness. The final section of former road From MP 20.3 to MP 20.8 was destroyed in the 1995 flood, so Alternative D proposed to relocate that section of road away from the floodplain and into the Stephen Mather Wilderness. Finally, as with Alternative D, this proposed new alternative would require legislation to amend the Stephen Mather Wilderness boundary, because the NPS does not have the legislated authority to “trade” wilderness.

AL4050. New Alternatives or Elements. Rebuild the road in order to provide access for visitors and valley residents with disabilities.

Concern Statement: Three comments stated the road should be rebuilt in order to provide access for those with disabilities. Some of these comments stated that road closure would violate the Americans with Disabilities Act.

Representative Quote:

- “I also believe critical protections under the Americans with Disabilities Act are violated in the NPS’ denying access that was previously provided to differently-abled visitors in this area.”

Response: The NPS sincerely empathizes with disabled visitors. However, in this case the only feasible action the NPS can take, within its designated authorities, is to implement Alternative B and close the road at Car Wash Falls. The legal requirements of the Americans with Disabilities Act are discussed in response to concern statement *PN11030*.

AL4060. New Alternatives or Elements. Amend the GMP so no longer responsible for road maintenance.

Concern Statement: One comment stated if the NPS closes the road, then the NPS should amend the GMP so it is no longer responsible for road maintenance.

Representative Quote:

- “...the National Park Service should make plans to either repair the road to Cottonwood OR submit a new General Management Plan Proposal which would remove the National Park from the responsibilities of maintenance and preservation of the road.”

Response: The 1995 General Management Plan for Lake Chelan NRA does state that the NPS will provide a road from the Landing to Cottonwood. However, the GMP envisioned the inevitable conflict between maintaining the road and preserving the scenic character and natural processes of the Stehekin River. The GMP balances these conflicting objectives by establishing the following criteria for protecting the public road system, including the Stehekin Valley Road, from flooding as follows:

“...Existing public roads [e.g. the Stehekin Valley Road] would be protected in erosion/river conflict zones only if (1) there are no feasible alternatives, (2) funds are available, (3) proposed actions would have lesser impacts than other alternatives, and (4) the proposed actions are permitted by the county, state and other federal agencies.”

Alternative C (road reconstruction) does not satisfy criterion one because Alternative D is feasible and could be implemented should Congress (a) amend the Stephen Mather Wilderness boundary to relocate the road, and (b) provide funding for road relocation. Alternative C does not satisfy criterion two because the costs would greatly exceed the available funding. Alternative C does not satisfy criterion three because road reconstruction would have substantially greater impacts to the Stehekin River and

its floodplain when compared to the other alternatives. Alternative D is feasible (criterion 1), but the NPS does not currently have the funding to relocate the road (criterion 2), nor does it have the authority to move the Stephen Mather Wilderness Boundary. In light of these circumstances, the NPS asserts that road closure as proposed in Alternative B is entirely consistent with the 1995 GMP. The GMP does not need to be amended to implement this action. The NPS agrees, however, that the next revision of the GMP for Lake Chelan NRA will need to clarify the road closure, and may need to recommend additional management actions should currently unforeseen needs arise in the future.

New Alternatives or Elements. Provide independent, qualified cost estimates for Alternatives C and D.

Concern Statement: Two comments explicitly questioned the high costs of Alternatives C and D and requested the NPS provide new cost estimates from independent, qualified professionals.

Representative Quote:

- “Provide independent and competitive cost estimates from qualified road construction engineers and contractors. I believe the high cost of Alternate C and D road construction could be reduced significantly if the planning, estimating and project management were performed by professional contractors rather than the National Park Service.”

Response: The NPS obtained qualified, independent cost estimates for road reconstruction (Alternative C) from engineers with the U.S. Department of Transportation, Federal Highway Administration. For road relocation (Alternative D), the NPS obtained independent and qualified cost estimates from engineers with the U.S. Department of Agriculture, National Forest Service. In both cases, the cost estimates were calculated to an accuracy referred to as Class “C”. Class “C” estimates are primarily used for long-range planning and compliance purposes (such as this decision). The estimates may appear to be high because they are adjusted for undefined expenses that will typically be quantified by the time the project is fully designed and ready for contract solicitation.

AL4080. New Alternatives or Elements. Implement Alternative D in stages to reduce cost.

Concern Statement: Two comments suggested the NPS implement Alternative D in stages given limited funding and the lengthy timeframe for legislative action that would be needed to amend the Stephen Mather Wilderness boundary and rebuild the road.

Representative Quote:

- “I realize that all of option D will take time and cost many dollars. However, it can be done in stages, perhaps opening to at least Bridge Creek or hopefully Glory as stage one.”

Response: The NPS does not have the funding to implement Alternative D in stages, nor the authority to relocate the road without a legislative amendment to the Stephen Mather Wilderness boundary.

AL4090. New Alternatives or Elements. Modify Alternative D to include trail along river.

Concern Statement: One comment suggested modifying Alternative D to also include a trail along the river.

Representative Quote:

- “Perhaps a walking trail could be improved along the river so the view, camping and fishing access would be improved especially for the young and elderly.”

Response: The NPS does not have the funding to build a trail along the river given the extensive engineering that would need to be done to prevent future flood damage and provide safe passage around cliff bands and related barriers to trail construction.

AL4100. New Alternatives or Elements. Modify Alternative B to include more parking at Carwash Falls.

Concern Statement: One comment suggested increasing the parking capacity at Carwash Falls or vicinity from six to twelve vehicles given the perceived high demand for parking.

Representative Quote:

- “...the number of parking spaces provided for in option B seems insufficient. With the number

<p>of residents, tourists and private vehicles in the valley, I would suggest creating more parking, or additional parking nearby for perhaps up to a dozen vehicles.</p> <p><i>Response:</i> The six-vehicle parking capacity was adequate following the 1995 flood that temporarily closed the road at Car Wash Falls. In addition, the close proximity of the wilderness boundary constrains the capacity of parking. In the near term, the NPS intends to stick with the original proposal of 6-vehicle parking capacity. If more capacity appears to be needed in the future, the NPS will evaluate the need at that time.</p>
<p>AL4110. New Alternatives or Elements. Modify Alternative C for only LEV and low noise vehicles.</p> <p><i>Concern Statement:</i> One comment suggested Alternative C should be modified to limit use of the road to low noise vehicles and low emission vehicles (LEV's).</p> <p><i>Representative Quote:</i></p> <ul style="list-style-type: none"> • “Support Alternative C. But road should only be open to low noise and low emission vehicles.”
<p>AL4120. New Alternatives or Elements. Develop cooperative agreement with local non-profit to maintain road.</p> <p><i>Concern Statement:</i> One comment recommended establishing an agreement with a local non-profit to assist or take over road maintenance on a voluntary basis and thus reduce costs.</p> <p><i>Representative Quote:</i></p> <ul style="list-style-type: none"> • “Sign an agreement with a local non-profit group such as the Stehekin Heritage Society. They might possibly take over maintenance of the road and you could have them sign liability waivers releasing the County or NPS of liability for any injuries incurred while they maintain the road at their own expense, using volunteer labor. This similar agreement has been in use and has worked great at Monte Cristo.”
<p>AL4130. New Alternatives or Elements. Modify Alternative C to terminate road at Shady</p> <p><i>Concern Statement:</i> One comment suggested rebuilding the road to Shady Campground (MP 14.6) if funding is limited and/or Congress does not amend the Washington Parks Wilderness Act of 1988.</p> <p><i>Representative Quote:</i></p> <p>“Shady camp area has plenty of room for a road terminus and if I had to wait for more money or engineering or even an Act of Congress this would be far superior to closing it at Carwash. Getting a road even to Shady would get the road open to within spittin’ distance of Bridge Creek and then a trail from there would at least be possible.”</p> <p><i>Response:</i> This proposed modification would still have substantial cost and impact in order to rebuild the road from Car Wash Falls to Shady Camp. The NPS believes the substantial fiscal and environmental costs of this proposal would not justify the benefits of foreshortening trail access to Bridge Creek Camp by approximately two miles (i.e. 1.3 miles to Bridge Creek from Shady Camp vs. 3.2 trail miles from Car Wash Falls to Bridge Creek).</p>
<p>AL4140. New Alternatives or Elements. Modify Alt. C to include only shuttle, foot and horse access</p> <p><i>Concern Statement:</i> One comment suggested Alternative C should be modified to limit use of the road from Bridge Creek to Cottonwood Camp to only allow public shuttles and non-motorized transportation.</p> <p><i>Representative Quote:</i></p> <ul style="list-style-type: none"> • “I agree that only shuttles, horses, bicycles and hikers should be allowed between Bridge Creek and Cottonwood Camp. I disagree with allowing other motorized vehicles on a reconstructed road such as mentioned in Alternative C. I would support Alternative C if other motorized vehicles would not be allowed on the reconstructed road.”

AL4150. New Alternatives or Elements. Modify Alternative B to provide shuttle service to Stehekin for PCT hikers

Concern Statement: One comment stated it is very important to provide Stehekin shuttle access to PCT hikers, and Alternative B does not allow access to Stehekin for the majority of through hikers (who are heading north). The NPS needs to provide shuttle service to Stehekin for PCT hikers.

Representative Quote:

I would be supportive of Alternative B except it is important to provide access to Stehekin for Northbound and Southbound PCT through hikers. Preferred alternative B does not allow access to Stehekin for the majority of through hikers, who are heading north. Please consider adding access for north and southbound hikers to the shuttle to Stehekin.”

Response: The shuttle bus operation as described for Alternative B (preferred alternative) would continue to provide PCT hikers (and all other visitors) with transportation from the PCT/Stehekin Valley Road intersection at High Bridge (MP 11.2). Hikers headed south on the PCT will no longer have shuttle access at Bridge Creek, as was the case before the flooding. Those hikers will have to travel approximately 5 additional miles southward on the PCT from Bridge Creek Camp to reach the shuttle at High Bridge.

CC1000. Consultation and Coordination: General comments from the U.S. Fish and Wildlife Service

Concern Statement: The U.S. Fish and Wildlife Service supports Alternative B (road closure).

Representative Quote(s):

- “The USFWS enthusiastically supports NOCA’s preferred alternative. We believe closing the road at Carwash is the best option for protecting fish and wildlife resources, maintaining reasonable visitor access, and spending public funds wisely. In addition to avoiding deleterious construction impacts, this option will allow river processes to occur naturally in the future, as there will be no streamside road that might prompt river control efforts. Consequently aquatic habitat and riparian conditions will develop without interference.

CR4001. Cultural Resources: Impact of Proposal and Alternatives. Road has significant historic value.

Concern Statement: One comment asserted the Stehekin Valley road has significant historic and interpretive value that should be protected by being kept open and its history interpreted.

Representative Quote(s):

- “[the road] has significant historic interest and value. Open to Bridge Creek since 1899, and to Horseshoe Basin since 1940, it showcases the historic mining activity that gave impetus to settling this area. Thus it is a fine interpretive asset.”

Response: NPS studies by Thompson (1970) and Luxenberg (1986) have concluded that the travel corridor between Lake Chelan and Cascade Pass is historically significant in the context of the National Historic Preservation Act. This conclusion, however, focuses on the significance of the travel *corridor*, as opposed to the Upper Stehekin Valley Road itself, because it is likely that the “original” wagon road and all its successors were re-routed as necessary in response to floods, landslides, avalanches, convenience, et cetera. The NPS has yet to determine fully what elements of the existing roadbed are historic because it is not clear how long it has existed, without modification, in its current alignment. However, it is known that the current section of road between Car Wash Falls and Bridge Creek uses little, if any, of the older wagon road. Up-valley of Bridge Creek, the extent to which the current road uses any of the old wagon trail is unclear, thus it is uncertain at this time whether the existing roadbed has historic “integrity”—an important criterion for eligibility to the National Historic Register. Sections of the existing Upper Valley Road might found to be historic as a Mine to Market road (dating to the truck road for Black Warrior Mine from 1947), provided they retain their historic integrity (e.g. original features).

The NPS is currently seeking funding for a detailed study to make the formal determination of historical significance under the terms of the National Historic Preservation Act. The NPS agrees that the travel corridor is a fine interpretive asset, and the knowledge gained from finalizing the evaluation of its historic significance will be used for interpretive purposes. Until the road can be formally evaluated and determined to be eligible or ineligible for listing under the Act, the NPS must manage the road as if it is historic. The management actions that will be implemented under this decision include removing non-historic elements including culverts and a concrete pad at Car Wash Falls. The NPS will take no actions that would reduce the historic significance of the roadbed itself.

References:

Luxenberg, Gretchen. 1986. Historic Resource Study for North Cascades National Park Service Complex. U.S. G.P.O. Publ. 1986; 695-684: Cultural Resources Division, Recreation Resources and Professional Services, Pacific West Region. 385 pp.

Thompson, Erwin N. March 1970. North Cascades N.P., Ross Lake N.R.A. & Lake Chelan N.R.A. History Basic Data. U.S. Department of the Interior, National Park Service Eastern Service Center, Office of History and Historic Architecture. 301 pp.

ED1010. General Editorial: EA is biased in favor of road closure

Concern Statement: Twelve comments asserted that the EA was biased in favor of road closure for various reasons including, but not limited to, use of erroneous information and a range of alternatives that excludes reasonable alternatives.

Representative Quote(s):

- “The public has been called upon to comment on an EA that is misleading, and has summarily discarded or not considered other viable options. To move forward at this point would be to rely upon a document that is promulgated upon erroneous information and which has adopted a preferred alternative developed from the same.”
- “An EA that assesses only extreme and opposite alternatives cannot provide a sound basis for good policymaking decisions. The park cannot afford the loss of credibility and trust engendered by an EA which appears to artificially setup a forced decision between extreme choices without considering middle ground alternatives. Thank you for considering these views.”

Response: This Public Comment and Response Report provides various justifications as to why seemingly “reasonable” alternatives were dismissed or otherwise not considered. In particular, various public comments recommended the NPS consider sixteen new alternatives or modifications to the existing alternatives. Responses to these comments are provided in the response to comments AL4000 through AL4150.

PN11010. Purpose and Need: Laws, Policies and Mandates. NPS has duty to maintain Upper Stehekin Valley Road.

Concern Statement: Forty comments variously stated the NPS has a duty to maintain the 23-mile Stehekin Valley road as intended by Congress and as stated in the 1988 General Management Plan for North Cascades National Park Service Complex.

Representative Quote(s):

- “It is apparent the National Park either does not understand that it is responsible for the maintenance and preservation of the road as described in the North cascades National Park Bill of Oct. 1968 and the General Management Plan adopted by the park in 1988 OR the National Park Service is trying to put up a smoke screen so the National Park Service does not have to maintain as much responsibilities and cost of the road.”
- I believe the EA is incomplete since it fails to address the legal basis of the road, the associated public rights to use the road, and the responsibility of the NPS to maintain the road under

PL90-544. If these rights and responsibilities were fully recognized and fairly evaluated in the EA, restoring the road all the way to Cottonwood might be justified. However, if the NPS proposes to forever close the road and attempts to erase the right-of-way beyond Carwash Falls (Ref: Alt B), there might be sufficient legal basis to return responsibility for management and maintenance along the route to Chelan County and/or the State of Washington.”

Response: Chelan County in 1970 transferred its interest in a portion of the Stehekin Valley Road by quitclaim deed to the United States, and vacated its interest in the remaining portion of the Stehekin Valley Road. In United States V. Chelan County, CS-92-0331-AAM (USDC E.D. Wash.), decided June 4, 1993, Chelan County was permanently enjoined from asserting a claim of title to the Stehekin Valley Road, and transfer of the road from the County to the United States was reaffirmed. In light of this history, the NPS firmly considers its ownership of the Upper Stehekin Valley Road and its right-of-way a matter of settled law.

The Washington Park Wilderness Act of 1988 (Public Law 100-668) established the Stephen Mather Wilderness boundary as being 50-feet on either side of the centerline of the location of the Upper Stehekin Valley Road—as it existed at the time of the bill’s passage. The Act did not include any additional provisions about maintaining the road in the event of a severe flood. Therefore, the NPS believes there is nothing in the law that would indicate Congress intended for the NPS to maintain the upper road when confronted with substantial damages requiring very costly if not infeasible repairs and numerous adverse environmental impacts.

The 1988 General Management Plan for North Cascades National Park Service Complex states: “The Stehekin Valley Road will be maintained at its current length, width and character.” It is very important to note, however, that the 1995 General Management Plan for Lake Chelan National Recreation Area supersedes the 1988 Complex-wide GMP regarding management of the Stehekin River and maintenance of the Stehekin Valley Road, including the upper portion of the Stehekin Valley Road within North Cascades National Park that is the subject of this decision.

As stated in response to Concern Statement AL4060, the 1995 GMP for Lake Chelan NRA addressed the inevitable conflict between maintaining the road and preserving the scenic character and natural processes of the Stehekin River. The GMP strives to reconcile this conflict by establishing the following management criteria for protecting the public road system, including the Stehekin Valley Road, from the natural processes of the Stehekin River as follows: “...*Existing public roads [e.g. the Stehekin Valley Road] would be protected in erosion/river conflict zones only if (1) there are no feasible alternatives, (2) funds are available, (3) proposed actions would have lesser impacts than other alternatives, and (4) the proposed actions are permitted by the county, state and other federal agencies.*”

Alternative C (road reconstruction) does not satisfy criterion one because Alternative D is feasible and could be implemented should Congress amend the Stephen Mather Wilderness boundary to accommodate road relocation and provide money for road relocation. Alternative C does not satisfy criterion two because the costs would greatly exceed the available funding. Alternative C does not satisfy criterion three because road reconstruction would have substantially greater impacts to the Stehekin River and its floodplain when compared to the other alternatives. Alternative D is a feasible alternative for road relocation so it satisfies criterion one. However, the NPS does not currently have the funding to relocate the road, so it does not satisfy Criterion two. Alternative D would have much less impact to the Stehekin River and its floodplain when compared to Alternative C, so it does satisfy criterion three. Further consultation with various agencies would be needed to determine whether Alternative D satisfies criterion four. Given these circumstances, the NPS believes it has fully satisfied its “duty” to maintain the Stehekin Valley Road within the authorities of its Enabling Legislation, the Washington Park’s Wilderness Act of 1988 and the 1995 GMP for Lake Chelan NRA.

PN11020. Park Operations: Guiding Policies, Regulations and Laws. NPS has duty to close road.

Concern Statement: Three comments explicitly stated rebuilding or relocating the road would violate a variety of federal laws and policies intended to protect park resources and to enhance the visitor experience.

Representative Quote(s):

- “In order to reconstruct or reroute the road the NPS would be violating its own management policies with respect to location of road systems, floodplain management, wetland protection, resource protection, and Soundscape preservation and noise management. The efforts to maintain or relocate the [road] would [also] result in degradation to the Wild and Scenic River characteristics...”
- “Alternative B – retiring the 10 miles of road between Carwash Falls and Cottonwood Camp—best meets the spirit and requirements of the Wild and Scenic Rivers Act, as well as the requirements of the National Park Service Organic Act, The Lake Chelan National Recreation Area General Management Plan (LACH GMP) and NPS Management Policies.”

Response: The NPS agrees. Please refer to the Finding of No Significant Impact for the justification.

PN11030. Purpose and Need: Laws, Policies and Mandates. NPS has duty to rebuild road in order to comply with the ADA.

Concern Statement: Two comments expressed concern with the Americans with Disabilities Act (see response to Concern Statement AL4050), however, one comment in particular challenged the NPS to evaluate the legal requirements of the Americans with Disabilities Act because road closure could violate that federal law.

Representative Quote(s):

- “Finally, time does not allow for consideration of other more complicated but related issues, such as whether NPS, in eliminating previously provided access to disabled persons, violates the ADA. I bring this matter to your attention solely because applicability of the ADA seems likely where existing access is removed, and ask you to review your responsibilities under that act with respect to each of the alternatives you ultimately choose to consider...”

Response: Section 507 (c) of the Americans with Disabilities Act is the only section that pertains to the executive branch of the federal government. That section reaffirms several key requirements of the Wilderness Act including: (1) allowing disabled individuals to use wheelchairs (or other human-powered mechanical devices) in federally-designated wilderness, and (2) not requiring agencies to provide any form of special treatment or accommodation, or to modify any conditions of lands within a wilderness area in order to facilitate such use. Instead of the ADA, the executive branch of government must follow the Rehabilitation Act of 1973, which prohibits discrimination in services and employment on the basis of a handicap. Federal regulations (43 CFR part 17, subpart E) clarify this law by stating that agencies are not required to take any actions or provide access that would (a) result in a fundamental alteration in the nature of a program or activity; or (b) cause undue financial and administrative burdens. Reconstruction of the Stehekin Valley Road would be very expensive and/or infeasible. Chapter 5 in the EA discusses the costs associated with implementing each of the alternatives, and Table 4 contains a comparison of the discussed costs. Please see response to comment AL4000 concerning feasibility of road reconstruction.

PN11040. Purpose and Need: Laws, Policies and Mandates. The National Trails System Act not described.

Concern Statement: One comment stated the “Relevant Laws, Policies and Management Plans” section of the EA failed to include a discussion of the National Trails System Act.

Representative Quote(s):

- “The initial run down of legislation with which the decision must comply lacks a reference to the National Trails System Act, but the act is referenced in the analysis on a regular basis. If the EA is revised it would be good to correct this oversight.”

Response: The National Trails System Act, as amended (16 U.S.C. 1241–1251), established the Pacific Crest National Scenic Trail in 1968. National scenic trails are defined as extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass. They are located so as to represent features which exhibit significant characteristics of the physiographic regions of the nation. Section 1246 (b) (i) states the Secretary of the Interior may relocate segments of a national scenic trail with the concurrence of the National Park Service Director, upon a determination that the relocation is necessary to preserve the purposes for which the trail was established.

PO4010. Park Operations: Impact of Proposal and Alternatives. Cumulative cost of road repair and maintenance not fully disclosed.

Concern Statement: One comment stated the NPS has spent considerable amounts of money and non-renewable park resources (e.g. gravel and rock) on road repairs and maintenance, including considerable money on repairs to the road below Car Wash Falls following the October 2003 flood. By conducting environmental impact analyses of repair actions on segments of the road, the present EA fails to disclose fully the true costs of maintaining the Stehekin Valley road and leads to an incomplete understanding of the cumulative costs of road repair and maintenance.

Representative Quote(s):

- “Recent floods closed the last approximately 3 miles of road in 1995 and the 2003 flood made the road impassable at a number of places above and below Carwash Falls. The NPS has reopened the road to the vicinity of Car Wash Falls at significant expense. It is now considering the environmental consequences of repairing or rerouting the road above that area. NCCC [North Cascades Conservation Council] points out that this segmented approach to either emergency repairs and repairs of the Stehekin Valley Road under an Environmental Assessment below Carwash Falls leads to an incomplete understanding of the true costs of maintaining the Stehekin Road.”

Response: In the aftermath of the October 2003 floods, the NPS prioritized its response to flood damage by repairing sections of the lower Stehekin Valley Road to restore vehicle access to private property and NPS facilities. Two separate EA’s were prepared and management actions implemented to restore vehicular access to the lower valley. A single, comprehensive EA following the flood damage was not undertaken given (1) the urgent need to restore access to private property and NPS facilities; (2) emergency funding limitations to project-specific actions; and (3) the need to perform detailed surveys of flood damage and gather estimates for road repairs from the Federal Highway Administration and the U.S.D.A. Forest Service. This EA is the last EA needed to address the 2003 flood damage.

The cumulative cost of road repairs and maintenance since the Park and NRA were established is not accurately known. Such an estimate would take considerable staff time to research and compile, and some important information may be missing given the lengthy timeframe. However, enough information is available to place the cumulative cost of road repair and maintenance between \$2-10 million. In 1995 alone, the NPS spent almost \$1 million repairing the flood damage on the Stehekin Valley Road.

PO4020. Park Operations: Impact of Proposal and Alternatives. NPS must accept responsibility and cost of road repair and maintenance.

Concern Statement: One comment stated that if the NPS rebuilds the road it will be damaged in the future but the NPS should expect to repair the damages as the cost of doing business.

Representative Quote(s): “There is more than one way to clean up the road and yes maybe it will continue to have problems, but this is the job you have been given.”

SE4010. Socioeconomics: Impact Of Proposal and Alternatives. Road closure will have an adverse socioeconomic impact on business.

Concern Statement: Five comments stated that if the road remains closed it will have an adverse economic impact on tourism-related businesses because visitation will decline.

Representative Quote(s):

- “The road closure has brought about a steady drop in visitation by people that in the past have used Stehekin as their way to this section of the park. This in turn creates an economic hardship on the people that rely on tourism as an important part of their income. I predict that this visitor decline will become much more dramatic thru the end of this decade and beyond if the upper valley road is not open to vehicles. As I write this, the cheapest ticket to Stehekin is \$39 which is very discouraging to people especially when the upper valley road is closed.”

SE4020. Socioeconomics: Impact Of Proposal and Alternatives. Road closure will have an adverse socioeconomic impact on Stehekin Valley residents.

Concern Statement: Two comments stated that road closure would have an adverse impact on Stehekin Valley residents by reducing their motorized access into the park.

Representative Quote(s):

- “The Stehekin Community has had ready access to Cottonwood Camp, and trails along the way, since at least 1940. Without the road, the feeling is one of being hemmed in, deprived and tightly constrained. People outside the Stehekin Valley would appreciate this better were they to ask themselves the question, “How would I feel if I lived in a place where I could only drive 9 miles of road, being blocked from going farther by Lake Chelan on one end and unrepaired road damage at the other? We wonder how many people, including members of the many fine conservation groups we belong to have ever considered this while they have virtually unconstrained privilege of using a myriad of roads to reach hiking and vacation places from their homes, and daily shopping, entertainment and educational activities unavailable to the remote, isolated, Stehekin Community.”

TE4000. Threatened and Endangered Species: Impact of Proposal and Alternatives.

Concern Statement: Two comments questioned the status and adverse impact determinations reached in the EA for rare and listed species such as spotted owls.

Representative Quote(s):

- “...it is unclear how rebuilding the road in this area would be “Likely to Adversely Affect” the Northern Spotted Owl as no nesting pairs have been observed as recently as 2004 and 2005. It appears that either the author(s) did not check his/her (their) facts or assumed there should be owl nests in this area, even though none have reportedly been observed recently.”

Response: Adverse impacts to federally listed species can often be indirect, and do not require physical harm to the species in question to conclude an action “is likely to adversely affect” the species. In this case, the “Likely to adversely affect” determinations for the spotted owl were based upon impacts to spotted owl *habitat* from the increased noise and human disturbance that would result from road relocation. Furthermore, the lack of confirmed nesting sites in one season does not preclude owls from nesting in future years when favorable nesting and foraging habitat exist.

VE4001. Visitor Experience: Beneficial Impact of Proposal and Alternatives.

Concern Statement: Two comments stated road closure would have a beneficial impact on various elements of the visitor experience in the upper Stehekin Valley.

Representative Quote(s):

- “The Upper Stehekin Valley is located within designated wilderness and it is the experience of wilderness that visitors here seek. Closure of the Upper Road would provide new flat trail possibilities along a beautiful stretch of wild river and a wild approach to the peaks of the Cascade Crest. I myself have hiked along this beautiful stretch and would have enjoyed these walks more had I been hiking on a trail rather than a road and not occasionally been bombarded by the noise and dust of vehicles. Closing the upper road would effectively expand the wilderness, removing an inappropriate intrusion into it.”

VE4010. Visitor Experience: Adverse Impact of road closure.

Concern Statement: Two comments stated road closure would have an adverse impact on various elements of the visitor experience in the upper Stehekin Valley.

Representative Quote(s):

- “I had the privilege of spending every summer in Stehekin while I was growing up, as it has been used in my lifetime, I can’t think of another road in my personal experience that is used less for environmental exploitation, or more for instilling a deep appreciation of both natural and human history. I hope that when I grow old, or should I become disabled, that I can still show my family and friends the places that represent so much of my childhood, and provide so much context for my family’s background.”

VE4020. Visitor Experience: Adverse Impact on Pacific Crest Trail experience.

Concern Statement: One comment stated that the EA failed to address adequately the impacts of the Alternatives on the PCT experience. In addition, the description of Alternative D (road relocation) failed to provide a detailed design for the new location of the PCT, so it is impossible to understand fully the nature and extent of potential impacts of the proposed new route.

Representative Quote(s):

- “To select an alternative which would degrade the experience would be out of compliance with the National Trails System Act. Current analysis is incomplete and inadequate. No detailed design work has been completed so it is impossible to adequately judge the character of the new trail. It is not clear that a stable and maintainable location exists between the present trail location and the river. A trail location below the new road location would mean ongoing impacts from drainage runoff, disturbance from ongoing road maintenance, sounds and smells of motorized traffic and a loss of remoteness along this entire section of the PCT. Since no detailed trail design exists, the mitigation measures presented are inherently inadequate.”

Response: The Alternative C description of the EA described in general terms the proposed reroute of the PCT and included a map showing its proximity to the new road. The Affected Environment section described the natural and cultural resources in the area, along with current patterns of access and use. The impact analysis disclosed that reroute would be “closer in proximity to the PCT than the former road, and hikers and stock users would experience noise, dust, and exhaust from shuttle, Park, and private vehicles at times.” The impact analysis concludes that visitors who desire “increased solitude, natural soundscapes and remoteness” would experience “moderate to major and long-term adverse impacts.” According to CEQ guidelines (NEPA's Forty Most Asked Questions; Question 36a.), an EA is intended to be a “...concise document, it should not contain long descriptions or detailed data which the agency may have gathered.” While the EA could have provided more detail on this point, the NPS believes the details that were provided were sufficient to support the impact analysis.

The NPS does concur, at least in part, with the assertion that the mitigation details were inherently inadequate. There simply would be no way to mitigate fully the impact of road relocation because it would place the PCT much closer to the road than at present.

VS4000. Visitor Safety: Impact of Proposal and Alternatives

Concern Statement: Two comments stated protection of visitor safety was an important justification for maintaining a road.

Representative Quote:

- “By not returning the road to the upper valley we also take away emergency services where it is most vital. It is an extremely long way from the present end of the road to the upper hiking areas. We must consider safety issues.”

Response: Section 7.5.7 of the EA (Alternative B, Visitor Access Experience and Park Operations) discussed impacts to visitor safety and park operations. Emergency services generally do not require motor vehicle access because park operations generally rely upon air support.

VU4001. Visitor Use: Impact Of Proposal and Alternatives. Adverse impact to visitors with limited physical abilities and/or limited time to visit.

Concern Statement: Forty one comments stated closing the road would substantially limit visitor use and enjoyment of the area, especially for those with limited physical abilities such as handicapped persons, children and the elderly and/or those visitors with limited time. Some of these comments questioned the criteria used to determine impacts.

Representative Quote(s):

- “Don’t think for a minute that those of us that no longer want to be called environmentalists have any less love and concern for this place. We were here before many were born and we wanted it saved for our children and all generations, but—we want it also for the handicapped, feeble, children and the working public that may only have one day, once in a lifetime to have a day trip to the end of the road in Stehekin.”
- “Families with young children and/or handicapped individuals will be forever deprived of seeing the grandeur of the park and the upper valley. The report repeatedly describes these losses as “negligible”. It is not clear what criteria were used to determine that these impacts are negligible—they are not described in the report.”

Response: The NPS sincerely empathizes with the reduced access for those with limited physical abilities. Section 7.1.3.7 (Table 14) of the EA described the criteria used to determine impacts to Visitor Access. According to these criteria, the EA concluded that those who desire continued vehicle access “moderate to major, long-term adverse impact”.

VU4010. Visitor Use: Impact of Proposal and Alternatives on Scientific Research and Collecting.

Concern Statement: One comment stated that closing the road would limit access for ecological research in the upper Stehekin Valley.

Response: The NPS agrees. However, access will still be available via foot and/or stock, as is the case for the vast majority of the Complex that is not accessible by motor vehicle. In spite of the limited access, a wide array of ecological research is ongoing in the Complex, and much of this research benefits from roadless conditions because roads (and other human uses) impact the native ecology of the area and often confound the questions the research is attempting to answer.

VU4020. Visitor Use: Adverse Impact of Proposal and Alternatives on Pacific Crest Trail hikers.

Concern Statement: One comment stated that closing the Upper Stehekin Valley Road would make it more difficult for Pacific Crest Trail hikers to resupply in Stehekin, thus making it more difficult logistically to complete the hike in one year.

- *Representative Quote(s):* “...for those who like to do the Pacific Crest Trail it makes an easy way for them to get from the landing area (which most use as a drop off point) to the Bridge Creek trailhead to continue their hike. By having this road closed it creates a burden for those Pacific Crest Trail hikers who are trying to complete that hike in one year.”

Response: The NPS disagrees. The Stehekin Shuttle will still be readily available from High Bridge. For those hiking northward (the vast majority), road closure will have no effect on PCT hikers because the PCT crosses the road at High Bridge. For those hiking southward, shuttle access will no longer be available at Bridge Creek. Hikers will have to continue down the PCT approximately 5 miles to the next closest shuttle pick-up at High Bridge. For most long distance hikers, this additional short distance would be immaterial.

VU4030. Visitor Use: Impact of Proposal and Alternatives on Stehekin Valley Residents

Concern Statement: Two comments stated the quality of life for Stehekin Valley residents would be substantially adversely impacted by road closure.

Representative Quote(s):

- “Stopping vehicle access at Carwash Falls seriously affects up-Valley access for ourselves and for almost everyone except the super-young, super-athletic, super-equipped. This is a serious diminution of the quality of life for Stehekin residents.”

VU4040. Visitor Use: Impact of Proposal and Alternatives on Day Hikers

Concern Statement: One comment stated the impact analysis in the EA underestimates the adverse impact to day hikers and fails to provide adequate mitigation.

Representative Quote(s):

- “Fully a third of the trails will be eliminated as day hikes and the miles of hiking trails in the valley will likely shrink as former day hiking trails are unused or unmaintained. In a recent issue of Washington Trails magazine, it is noted that the use for which demand is increasing is day hiking in wilderness as a respite from our busy lives. And yet, this assessment calls that use insignificant. the reality is, it is one of the recreational pursuits that is actually in the park and will likely increase. The only mitigation mentioned is allowing outfitted camps at bridge Creek and other locations. While important, this does not serve the same user group and creates a fee based recreation where free use existed.”

Response: Please see response to concern statement AL4030.

WH4010. Wildlife And Wildlife Habitat: Impact of Proposal and Alternatives

Concern Statement: One comment suggested that closure of the upper road would concentrate recreational use in the lower valley and cause adverse impacts to wildlife.

Representative Quote(s):

- “I would like to propose another consideration for rebuilding the road. With half the valley inaccessible (and that is how I feel with no road), all the visitors are confined to the lower valley for recreating. This has to have impacted the fish and wildlife.”

Response: The NPS disagrees. As disclosed in the EA, closure of the upper road will have a beneficial impact on fish because maintenance and use of the road will cease and aquatic habitat will improve. Similarly, impacts to wildlife are anticipated to be long term and beneficial because “road related mortality, noise and human activity would not occur”. See also Concern Statement CC1000.



United States Department of the Interior

NATIONAL PARK SERVICE

North Cascades National Park
Lake Chelan National Recreation Area
Ross Lake National Recreation Area
810 State Route 20
Sedro-Woolley, Washington 98284-1239

IN REPLY REFER TO:

D32 - NOCA

8 June 2006

To: Chief Resource Management, North Cascades NPS Complex (NOCA)

From: NOCA Geologist

Subject: Slope stability on upper Stehekin Road near Shady Camp

On June 6, 2006 Vicki Gempko (Stehekin District Natural Resources Specialist), Roy Zipp (Environmental Protection Specialist) and I visited the unstable slope that has led to the destruction of a 250 ft stretch of the Stehekin Valley Road. The purpose of this trip was to assess the condition of the slope as it continues to adjust to the record 2003 flood. Specific goals included:

- Measure the distance from the Wilderness boundary to the edge of the slide;
- Assess condition and future activity of slide; and
- Document change since 2003.

While working my way to the toe of the landslide, I measured the angle of the adjacent stable, vegetated slope at 35-40°. Presumably this is the angle that the material in the slide will also eventually stabilize at. While scrambling down this slope I also noticed that many of the trees on the 'stable' slope downstream of the slide had pistol-gripped trunks, indicating slope instability caused by snow creep, and/or erosion of the toe of the slope by the river, and/or instability of the bank material. Trees at the head of the slide and the upstream end were also pistol-gripped.

In the past year the head of the slide has continued to move into the slope toward the Wilderness boundary, albeit at a slower rate. The distance to the Wilderness boundary from the head-scarp or highest point of the slide is now as close as 20 ft (Figures 1, 2 and 3). The slide has also grown laterally to have claimed approximately 200 ft of the road, compared to only minor road shoulder loss immediately after the flood. My estimate of total bank recession since visiting the site shortly after the 2003 event is 38 ft. The slide has grown laterally toward the Wilderness boundary about 5 ft in the last year, with recession rate having slowed considerably since the year or so after the flood.

Several conditions continue to make the slope active including the loose-granular texture of the bank, the presence of springs on the face of the slide, and the steep slope angle at the upper part of the slide. The slope continues to adjust to removal of a vast amount of material by the river during the flood, and the height of the head scarp has shrunk to 40-50 ft, while maintaining a 55-90° slope. As the steep slope has retreated, the apron of material beneath the head scarp has grown and has a surface slope angle of 35-40° (Figures 2 and 3). The river bank at the toe of slide is composed of large boulders and appears to be somewhat armored from high water at this time due to the contribution of large boulders from the slide.



2003



2005



2006

**Figure 1. Photographs of Shady slide looking upstream.
Yellow arrows highlight a datum for time series comparison.**

Attachment I. Slope Stability on Upper Stehekin Road Near Shady Camp

The granular texture, lack of cohesiveness, and poor sorting of the bank material contribute to slope instability. The material is a highly variable mixture of sand and gravel with cobbles and boulders as large as 7 ft. diameter. Scattered throughout the face of the upper slope are lenses of sand and silt that extend for 10-15 ft laterally and are 1 ft. thick.

Five fairly large springs on the face of the slide contribute to instability by adding weight to the slope, by reducing friction between the granular soil particles, and by erosion of sediment within the bank (groundwater piping). It was not clear why the springs all occur at the same elevation along the bank. Material below the elevation of the springs appears to be denser, and includes slightly more fine sediment. Flow from each spring was on the order of 1 gallon per minute during the clear, warm weather of our late spring visit. Each of the five springs formed small gullies and were eroding the loose apron of sediment at the base of the slide.

Location of the springs seems to be controlling the lateral and vertical dimensions of the slide. For example, the head scarp begins at the approximate elevation of the springs, and a number of the lateral limits of recent failures are bound by the springs. These springs continue along this bank to the southeast and are crossed by the road downstream of the slide.

In summary, it is clear that with continued slope instability at the Shady slide it is not practical to attempt to reconstruct the road around the head of the slide. There just isn't room within the non-wilderness corridor. Further, I expect the slide to remain active for the foreseeable future due to the influence of the springs, the granular nature of the bank sediment, the 50 ft tall head scarp above the springs, and the angle of attack of the river on the toe of the slope. With the springs in mid-slope there remains the potential for failure of a large mass without notice. If the slide remains active until stabilized at 40°, the slide will grow well past the wilderness boundary (Figure 2). The trail around the slide seems stable for now, although it should be monitored every summer. The wilderness boundary has been marked to allow continued measurement of bank erosion toward the wilderness boundary. Finally, considering the ongoing instability, I strongly advise that we wait at least 2-3 years before drawing plans to cross the head of the slide with a wider road or trail.

Figure 2. Cross section through Shady slide.

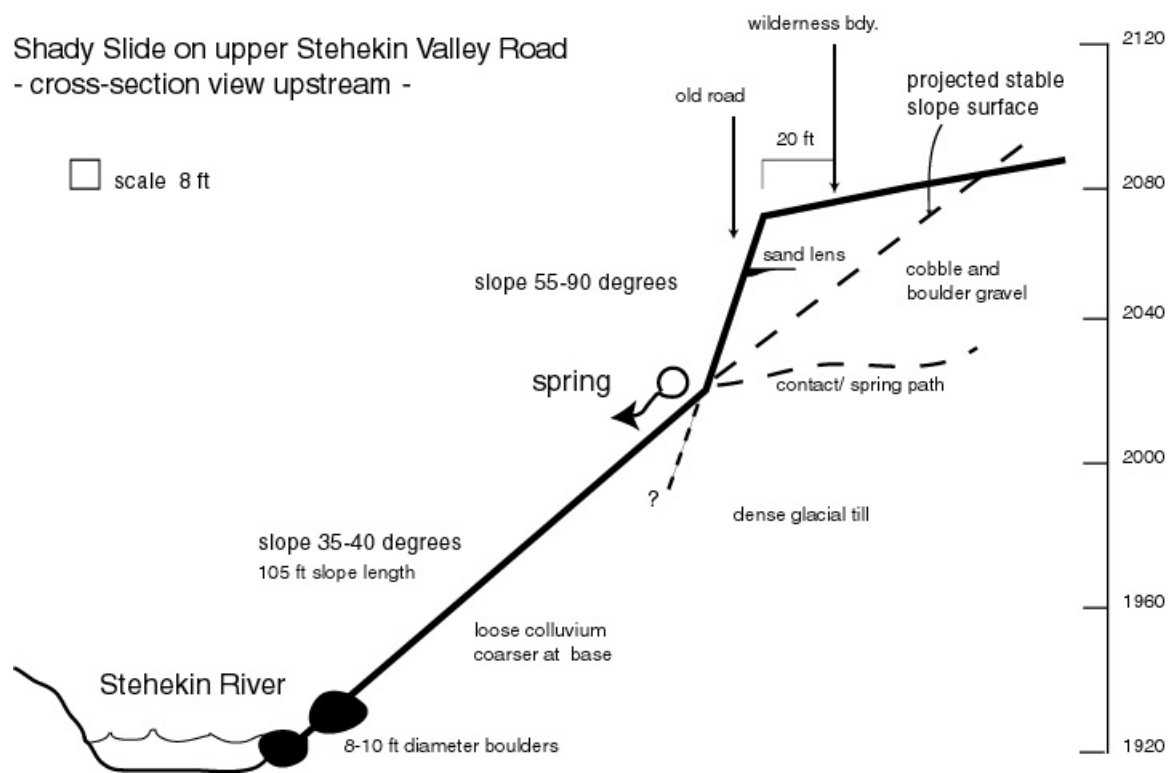


Figure 3. Schematic view of Shady slide.

