U.S. Department of the Interior National Park Service Mount Rainier National Park Ashford, Washington



FINDING OF NO SIGNIFICANT IMPACT

Nisqually to Paradise Road Repair and Improvements

December 2012

The National Park Service (NPS), in cooperation with the Federal Highway Administration, Western Federal Lands Highway Division, plans to resurface, restore, and repair 17.6 miles of the road between the Nisqually Entrance and the developed area at Paradise in Mount Rainier National Park (park). The project is needed to address deficiencies in the condition of the road and safety concerns. Deteriorating road conditions are due to a number of factors including large volumes of traffic, abundant precipitation, structural and design deficiencies, and normal wear. Road deficiencies include inadequate drainage, surface slumps, soft spots, pavement warping and cracking, and the general deterioration in the condition of the pavement surface. The project includes rehabilitation of pavement on Ricksecker Point Loop Road and Paradise Valley Road. Also included is the installation of in-road buried conduits and junction vaults for future electrical power and telecommunication upgrades.

The Nisqually – Paradise Road corridor is an integral part of park operations and a component of the Mount Rainier National Historic Landmark District (NHLD). The road is an outstanding example of park landscape design, embodying the complimentary styles of rustic architecture and naturalistic landscape architecture. One of the objectives of this project is to ensure that rehabilitation work associated with contributing features to the NHLD are protected and restored according to the Secretary of the Interior's Standards for Rehabilitation.

This finding of no significant impact (FONSI) and the environmental assessment (EA) constitute the record of the environmental impact analysis and decision-making process for the road repairs and improvements on the Nisqually – Paradise Road. The NPS will implement the preferred alternative, which includes the site-specific repairs needed to address the identified deficiencies and the associated improvements to rehabilitate the road. The approved alternative includes measures for protection of park resources, safety improvements, and a sustainable road for visitor travel; and provides long-term conditions necessary to sustain scenic, natural, and cultural resources. Planned repairs will improve the efficiency of park operations by correcting structural deficiencies in the road and reducing maintenance requirements, as well as providing for improved visitor enjoyment and safety while protecting park resources. The preferred alternative was selected after careful review of resource and visitor impacts and public comment.

This document records (1) a FONSI as required by the National Environmental Policy Act of 1969 (NEPA) and (2) a determination of no impairment as required by the NPS Organic Act of 1916 (see Attachment A).

SELECTION OF THE PREFERRED ALTERNATIVE

Two alternatives were evaluated in the EA, including a no action alternative and one action alternative. Under the no action alternative, the road would not be rehabilitated. The action alternative, which is the preferred alternative to rehabilitate the Nisqually – Paradise Road as described in the EA, is the selected alternative for implementation. This alternative was selected because it best meets the purpose and need for the project, as well as project objectives to: 1) improve the efficiency of park operations, 2) provide for visitor safety and enjoyment, and 3) protect park resources.

The Selected Alternative is the same alternative as described in the EA for the preferred alternative. A clarification added ditch cleaning to the portion of the alternative description under the heading "Drainage Improvements", and a sentence was added in the EA (see Errata).

Road Repairs. The selected alternative is comprised of a comprehensive and integrated set of site-specific actions intended to address the deficiencies of the entire roadway for 17.6 miles between the park boundary at the Nisqually Entrance and the Paradise area. In addition, the 1.0-mile Ricksecker Point Loop Road and 2.2-mile Paradise Valley Road will be repaved. A variety of actions are needed to address structural and design deficiencies, and repair deteriorating road conditions. These measures include subgrade reinforcement, subexcavation, deep patches, and road repaving. Additional work is described below and in more detail in the EA.

Pullouts and Parking. Pullout improvements include paving several existing gravel pullouts, measures to improve accessibility at several pullouts, and structural improvements to a pullout near Longmire to protect the road from slumping. The Kautz Creek parking area will be reconfigured to improve visitor safety by shifting the west entry to improve sight distance and providing a vegetated berm separating the parking area and a new sidewalk from the road. Restriping parking spaces may slightly reduce parking capacity. Old asphalt in the Paradise lower parking area and upper parking area will be milled and repaved and a new concrete sidewalk will be added on the inside of the existing curb along the length of the new Jackson Visitor Center in the upper parking area. A small raised picnic area at the Narada Falls parking area will be formalized by adding new stone curbing, a crushed granite surface, and accessibility improvements.

Retaining Walls. Mechanically stabilized earth retaining walls will be constructed to prevent slumping of the road and adjacent guardwalls is needed near Christine Falls and at a site along the Ricksecker Point Loop Road.

Drainage Improvements. A new larger culvert and riprap embankment will be installed at New Tahoma Creek to improve the capacity for carrying flood flows. Several drainage improvements will be implemented at Kautz Creek to protect the road and improve conveyance capacity. Improvements include armoring both sides of the road east and west of the Kautz Creek road crossing and an existing roadside ditch with riprap. Placement of riprap in an existing ditch will prevent further bank erosion and thereby stabilize large trees perched at the top of the bank. Backfilling of soil will allow the slope to revegetate and cover exposed roots to prevent further degradation of tree roots on the bank. Existing culverts near Kautz Creek will be left in place. Poor road drainage at Narada Falls will be corrected and slumping at the parking area will be addressed with structural and drainage improvements. Additional drainage work will include replacement of about one-third of the existing 304 culverts in the project area, culvert and ditch cleaning, and stone masonry headwall restoration or replacement as needed. Some undersized culverts will be increased in size to accommodate flow conditions and fish presence.

Bridge Repairs. A variety of repairs and upgrades will be implemented to improve the condition of structural features adjacent to the Nisqually – Paradise Road, Ricksecker Point Loop Road, and Paradise Valley Road. Planned work includes repairs and upgrades to railing, decking, stone work, and other repairs at the Tahoma Creek Bridge, Kautz Creek Bridge and culvert crossing, Edith Creek Bridge, and Nisqually Glacier Bridge. A guardrail across Kautz Creek will replace the existing jersey barriers.

Utilities. The project includes placing conduits and utility vaults beneath the road for future primary electrical power cable and fiber optics telecommunication improvements. The new conduits will house primary electrical power conductors and fiber optic cable for telecommunication upgrades.

Construction Phasing. The first phase of work is scheduled for 2014–2015 depending on available funding. The second phase of construction is planned for 2016–2017 and also depends on available funding.

RESOURCE PROTECTION MEASURES

To minimize potential adverse impacts associated with the selected alternative, best management practices (BMPs) and resource protection measures will be implemented during the construction and post-construction phases of the project. General and resource-specific BMPs and resource protection measures for the project are listed in the table titled Resource Protection Measures in Attachment B to this FONSI. The NPS responsible party is identified for each measure, as well as who in the park is responsible for post-project monitoring of the effectiveness of the mitigation strategy.

OTHER ALTERNATIVES CONSIDERED

A no action alternative also was evaluated in the EA. Under the no action alternative, the Nisqually – Paradise Road would not undergo a comprehensive program of repairs and improvements. Instead, roadway deficiencies and the deficiencies of adjacent roadway facilities would continue to be addressed on a piecemeal basis. Larger and more costly preventive repairs including those to the pavement structure, deteriorating slopes, and inadequate drainage would not occur, thereby allowing the continued deterioration of the entire roadway prism. The no action alternative would not help offset rising maintenance costs associated with the present damaged and deteriorating road. Further road deterioration or damage is possible if drainage deficiencies and slope instabilities are not addressed. The no action alternative also would permit the continued deterioration of a contributing element to the NHLD. Piecemeal repairs to the road would be paid for using the park's own limited funds.

The NPS also considered, but rejected from analysis in the EA, several additional alternatives, such as minor improvements to the road surface. Actions such as milling and overlay or chip and seal would not address the underlying structural, geotechnical, and drainage issues. Maintenance costs would increase in the long term if structural and drainage deficiencies are not corrected. Resurface-only options were eliminated because they would not meet the project purpose and need.

The NPS considered a bridge rather than a replacement culvert for New Tahoma Creek. A new bridge may eventually be needed at this location to provide the capacity to convey larger flows and debris. However, it was determined that replacement of the existing 3-foot by 6-foot culvert with an 11-foot-diameter culvert will substantially improve conveyance of existing flows and some of the overbank flows from Tahoma Creek. A new culvert also will provide fish passage. While the larger culvert will not be adequate to convey large flood flows, construction of a bridge is beyond the scope and funding available for the rehabilitation project.

Several options were considered to protect the road and convey flood flows at Kautz Creek, including armoring the overflow ditch and adding culverts at the sag in the road east of Kautz Creek to increase conveyance capacity during floods. Additional culverts would increase the existing conveyance capacity during flood events, but would not provide as much protection of the road as the selected alternative. Increasing the elevation of the road by about 2 feet for a distance of about 1,500 feet was also considered to improve conveyance capacity. Raising the elevation of the road would improve flood conveyance, but the selected alternative will better allow natural stream migration to occur while armoring the road. Construction of a bridge was considered; however, because of the dynamic nature of Kautz Creek and uncertainty about future changes in the channel location, it is difficult to know where to place a bridge. Construction of a bridge may be considered in the future, but it is currently beyond the scope and funding available for the rehabilitation project. While all of these options would help address drainage issues at Kautz Creek, the selected alternative provided the best immediate solution to protecting both the road and adjacent natural resources.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

According to the Council on Environmental Quality regulations implementing NEPA (43 CFR 46.30), the environmentally preferable alternative is the alternative "that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources. The environmentally preferable alternative is identified upon consideration and weighing by the Responsible Official of long-term environmental impacts against short-term impacts in evaluating what is the best protection of these resources. In some situations, such as when different alternatives impact different resources to different degrees, there may be more than one environmentally preferable alternative."

The selected alternative to rehabilitate and repair the Nisqually – Paradise Road is the environmentally preferable alternative for several reasons: 1) it will best preserve the natural and cultural features along the road because it implements structural improvements that will provide long-term protection of environmental and cultural resources adjacent to the road; 2) drainage improvements will reduce the potential for road failure, erosion, and impacts on water quality and cultural resources; and 3) it will support sustainable design concepts and energy efficiency by providing for the reuse of existing asphalt. For these reasons, the preferred alternative causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources, thereby making it the environmentally preferable alternative.

By contrast, the no action alternative is not the environmentally preferable alternative because although no construction or ground-disturbing activities will damage previously undisturbed elements of the biological and physical environment 1) it will not protect park natural and cultural resources as the road will continue to deteriorate without rehabilitation; 2) inadequate drainage could lead to road damage, erosion, and impacts on water quality, natural resources, and cultural resources; and 3) continued high maintenance requirements will not be energy efficient.

WHY THE SELECTED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR § 1508.27, significance is determined by examining the following criteria.

Impacts that may be both beneficial and adverse: A significant effect may exist even if the agency believes that on balance the effect will be beneficial

Implementation of the selected alternative will result in some adverse impacts; however, the overall benefit of the project outweighs the negative effects. No major adverse or beneficial impacts were identified that will require analysis in an environmental impact statement (EIS).

Air Quality: Construction will cause short-term negligible to minor adverse impacts on air quality from increased dust and vehicle and equipment exhaust, which generates greenhouse gas emissions. Road improvements will not increase vehicle capacity and, thus, there will be no long-term effect on air quality or greenhouse gas emissions.

Vegetation and Special Status Plant Species: Road rehabilitation will impact vegetation from ground-disturbing activities such as compaction of the road shoulder, excavation, and increased potential for introduction of exotic plant species. Placement of riprap at New Tahoma Creek and Kautz Creek will have a local long-term impact on roadside vegetation. Excavations within the road for structural repairs will have a local long-term minor adverse impact on tree roots that may lead to mortality for up to 17 trees larger than 18 inches in diameter at breast height. Other road improvements, including replacement of about 100 culverts, will have a local short-term minor adverse effect on vegetation. An increase in the establishment, distribution, and abundance of invasive plant species will occur from soil disturbance, but will be reduced with weed control practices. A few specimens of state rare plant species—gnome plant and lanceleaf grapefern—may be adversely affected by construction; although salvage and transplanting will be used to reduce impacts. One bryophyte species of interest is likely to be adversely impacted from ditch work adjacent to the road. Improvements to drainage and reductions in erosion will have a long-term beneficial effect on vegetation.

Wetlands: Grading of roadside ditches that have filled with sediment to restore drainage away from the road will have a long-term adverse impact on about 1 acre of wet ditches that support wetland plant species. Replacement of about 100 culverts and culvert cleaning at some locations will result in small temporary wetland disturbances or sediment deposition in wetlands at culvert inlets and outlets. Several existing culverts will be replaced with larger culverts to support fish passage. Installation of the larger culverts will have less than 0.25 acre of temporary impacts on wetlands. The new culverts will have a beneficial effect on the adjacent wetland complex from improved hydrology and fish passage. Installing the new culvert at New Tahoma Creek and placing riprap at the culvert outlet will result in incidental short-term impacts on less than 0.007 of an acre of wetlands and less than 0.10 of an acre of stream channel below the ordinary high water mark. No permanent loss of stream channel will occur at New Tahoma Creek. Placement of rock below the existing West Side Road culvert outlet to reduce scour and facilitate amphibian movement will affect a small area of waters, but no wetlands. The Kautz Creek drainage improvements will result in a permanent impact on less than 0.01 of an acre of wetlands from placement of riprap fill in the existing overflow ditch. Less than 0.01 of an acre of streambed will be permanently affected by riprap placed near inlets to the two 12-foot-diameter culverts on Kautz Creek. Road repairs and drainage improvements will have a long-term beneficial effect on adjacent wetlands and downstream aquatic resources from improved water conveyance, and reduced erosion and sediment deposition.

Water Resources-Quantity and Quality: Road rehabilitation and drainage improvements will have local short-term minor adverse effects on water quality from surface disturbances that generate erosion and increased sediment in runoff. Rehabilitation work will have a long-term benefit on water resources

by increasing the conveyance capacity of drainage structures, and improving or restoring hydrologic functions. Water extractions from local streams for use during construction will result in a local short-term minor adverse effect on streamflow and water quality from periodic withdrawals.

Floodplains: Installation of new drainage structures at New Tahoma Creek and drainage improvements at Kautz Creek will have a long-term beneficial effect by increasing the capacity to carry flood flows and reducing the potential for damage to the road and other resources. A floodplain statement of findings was completed to evaluate impacts to floodplains (Attachment C).

Fish, Wildlife, and Special Status Fish and Wildlife Species: Noise and construction disturbance will temporarily impact fish, amphibians, mammals, birds, and some special status wildlife species. The selected alternative may affect, but is unlikely to adversely affect, the federally-listed northern spotted owl. Mitigation measures will be implemented to restrict the timing of construction activities near northern spotted owl habitat until young owls have fledged. Because it is not feasible to limit construction to avoid the breeding season for the federally listed marbled murrelets, construction activities may affect, and are likely to adversely affect, murrelets. Mitigation measures for northern spotted owls also will reduce impacts on marbled murrelets. As described below under *Public Involvement and Consultations*, the U.S. Fish and Wildlife Service issued a draft no jeopardy conclusion and an incidental take statement for marbled murrelet and reasonable and prudent measures and terms and conditions to minimize impacts to northern spotted owls and marbled murrelets (Attachment D).

Culvert replacement, ditch grading, and other road work near amphibian habitat, particularly during night work, will result local short-term moderate adverse impacts to four amphibian species of concern — Cascade frog, tailed frog, Van Dyke's salamander, and Larch Mountain. Impacts on other special status species that are not federally-listed will be local, short- to long-term, minor to moderate, and adverse from temporary disturbances during construction. Installation of a fish-passable culvert at New Tahoma Creek and other culvert replacements will have a long-term benefit on cutthroat trout and other aquatic species. There will be no effect to essential fish habitat for Chinook salmon, Coho salmon, or pink salmon.

Cultural Landscape: Local short-term negligible to minor adverse impacts on the cultural landscape setting will occur during project construction. However, road rehabilitation will have a local long-term beneficial impact on the cultural landscape and associated historic structures from improvements designed to repair and replace deteriorating structural features that contribute to the integrity of the road. The project will not alter any of the character-defining features of the road and will not adversely affect historic properties, including the Mount Rainier National Historic Landmark District.

Archeological Resources: The selected alternative will not adversely affect any known archeological resources. Limiting the majority of the rehabilitation to the existing road prism, and monitoring by a park archeologist during ground-disturbing activities in culturally sensitive areas, will reduce the potential for adverse impacts.

Visitor Use and Experience: Traffic delays will inconvenience visitors traveling along the Nisqually – Paradise Road during construction. In response to construction activities, some visitors may avoid the park, visit other portions of the park, or choose alternate routes for regional travel connections. The park will inform visitors in advance of construction via a number of sources so visitors can best plan their schedule and activities and minimize impacts. The effect on visitor experience and recreation resources will be short-term, moderate, and adverse at the local and parkwide level during construction. The

selected alternative will provide local long-term beneficial effects on the quality of the visitor experience following construction by improving the quality and condition of the road.

Visual Quality: Road rehabilitation will have a local short-term minor adverse impact on visual quality during and immediately following construction work, but will have a long-term beneficial effect by protecting and preserving the scenic and visual character of the road.

Public Health and Safety: The selected alternative will address public health and safety concerns associated with the Nisqually – Paradise Road. Improvements to road pavement, visibility, sight distance at the Kautz Creek parking area, and drainage will improve safety and driving conditions. A local long-term beneficial effect on public health and safety will occur from improvements to the structural features of the road and safety measures that reduce the potential for accidents.

Park Operations: Improvements to road pavement, embankments, and drainages will improve safety and driving conditions, reduce maintenance requirements, and reduce the risk of future road failure. Construction work and associated traffic delays will cause a disruption in normal traffic patterns, parking, and visitor activities in the park; and place a greater demand on park staff. A local and parkwide short-term moderate adverse impact on park operations will occur during construction. Road repair will have a local long-term beneficial effect on park operations by improving the road surface and decreasing maintenance requirements.

Resource protection measures, as listed in Attachment B will reduce adverse effects. Additional detail on resource effects is found in the EA.

Degree of effect on public health or safety

Rehabilitation and improvements will address public health and safety concerns associated with deterioration of road conditions. Improvements to road pavement, visibility, sight distance at the Kautz Creek parking area, and drainages will improve safety and driving conditions. The selected alternative will result in local long-term beneficial effects on public health and safety from improvements to the structural features of the road and safety measures that reduce the potential for accidents. Traffic-control measures will be implemented to protect visitors during construction.

Degree to which effects on the quality of the human environment are likely to be highly controversial

Throughout the environmental process, the proposal to rehabilitate Nisqually – Paradise Road was not highly controversial, nor are the effects expected to generate future controversy. None of the identified environmental effects from implementation of the project were highly controversial and there is no indication of controversy over the nature of the effects. Given the substance of public comments, there is no evidence that the effects on the quality of the human environment will be highly controversial. Responses to substantive comments on the EA are included in the *Public Involvement and Native American Consultation* section below.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks

The road rehabilitation meets project objectives through implementation of structural improvements that correct damaged and deteriorating road conditions, address public safety, provide for visitor enjoyment, and protect park natural and cultural resources. The anticipated effects on the human environment, as

analyzed in the EA, are not highly uncertain, unique, and do not involve unknown risks. Resource conditions in the project area are well known and the anticipated impacts from implementing commonplace road rehabilitation work are understood based on FHWA and NPS experience with similar projects.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

Rehabilitation of Nisqually – Paradise Road will not result in significant adverse effects on the natural environment, cultural resources, or visitor experience because the project was designed to minimize resource and visitor impacts, and resource protection measures were incorporated into the project to further reduce identified adverse effects. The selected alternative will provide for the long-term protection of resources and will not establish a precedent for future actions that could have significant effects, nor does the action represent a decision about future actions.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts

The EA concluded that past, present, and future activities, when combined with the rehabilitation of Nisqually – Paradise Road, will have local long-term minor adverse cumulative impacts on vegetation, vegetation special status species, wetlands, and archeological resources. Cumulative effects on fish, wildlife, and special status fish and wildlife species will be local, long-term, minor to moderate, and adverse. Parkwide short-term negligible to minor cumulative impacts on air quality and short-term moderate impacts on park operations will occur during construction. Cumulative effects on water resources, floodplains, cultural landscape, visitor use and experience, public health and safety, and park operations will be local, long-term, and beneficial. Overall, the selected alternative will have no significant cumulative effects.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources

The project will not alter any of the character-defining features of the Nisqually – Paradise Road. The park determined that the undertaking will have no adverse effect on historic properties, including the Mount Rainier National Historic Landmark District, or disturb any known archeological resources. In addition, the NPS concludes that implementation of the selected alternative will have no adverse effect on Indian trust resources, ethnographic resources, or museum collections. The Washington State Historic Preservation Office (SHPO), in a letter dated April 26, 2012, concurred that the project will have no adverse effect on National Register-eligible or listed historic and cultural resources.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat

Northern spotted owls, a federally-listed threatened species, could be directly and indirectly affected by construction disturbance, collisions with vehicles, and habitat modification. The project will result in short-term adverse impacts from increased levels of human activity and increased noise levels at specific construction sites as well as equipment and vehicle travel through habitat to reach construction areas outside of suitable habitat. The project area will overlap nearby roosting and nesting habitat for four northern spotted owl activity centers. It is likely individual spotted owls that are foraging or roosting

close to the road may occasionally be flushed away from a foraging perch or a roosting site by project noise and activity. With implementation of resource protection measures to restrict the timing of construction activities near owl territories to avoid disturbance to owl habitat, the selected alternative will have local short-term minor impacts on the northern spotted owl. The park determined the selected alternative may affect, but is not likely to adversely affect, the northern spotted owl.

Construction disturbance and habitat modification also may adversely affect the federally-listed marbled murrelet. Project work will coincide with the murrelet nesting season (April 1 through September 23), and will continue into the early fall months after the nesting season has passed. Noise and activities associated with road rehabilitation have the potential to disturb murrelets nesting in the project area. Construction activities will not reduce available habitat for marbled murrelets because most work will occur in previously disturbed areas within the existing road prism. Where vegetation disturbance occurs adjacent to the road, it will not impact suitable marbled murrelet habitat. Timing restrictions for day and night work in marbled murrelet habitat will reduce potential impacts on marbled murrelets. However, even with implementation of the mitigation measures, the selected alternative will have local short-term moderate adverse impacts on marbled murrelets due to construction noise and activity during the sensitive breeding season. Thus, the selected alternative may affect, and is likely to adversely affect, the marbled murrelet.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas

As described in the EA, ecologically critical areas, prime farmlands, and wild and scenic rivers will not be affected by the project. There will be local long-term minor adverse effects from road repair and improvement disturbances that are estimated to affect about 1.0 acre of roadside ditch supporting wetland vegetation, and less than 0.25 of an acre of wetlands from drainage work at New Tahoma Creek and installation of two new fish-passable culverts on small perennial streams. Less than 0.10 of an acre of stream channel will be temporarily disturbed from culvert installation at New Tahoma Creek and placement of rock to improve amphibian movement at the West Side Road culvert outlet. Replacement of about 100 culverts will result in a temporary wetland disturbance at some locations. A local long-term adverse impact on less than 0.01 of an acre of wetlands will occur from drainage work at Kautz Creek. Road repairs and drainage improvements will have a long-term beneficial effect on wetlands from improved water conveyance, reduced erosion, and less sediment deposition.

There will be localized short-term negligible to minor adverse impacts on the cultural landscape setting during project construction. However, road rehabilitation will have a local long-term beneficial impact on the cultural landscape and associated historic structures from improvements designed to repair and replace deteriorating structural features that contribute to the integrity of the road.

Whether the action threatens a violation of federal, state, or local environmental protection law

The selected alternative does not violate any federal, state, or local environmental protection laws.

PUBLIC INVOLVEMENT

Public Scoping. Mount Rainier National Park initiated public scoping with a press release on November 5, 2009 to provide the public and interested parties an opportunity to comment on the proposed project. The park also sent letters to more than 200 interested individuals; organizations; state, county, and local governments; federal agencies; local businesses; and media outlets describing the proposed action and

asking for comments. Comments were solicited through December 5, 2009. The park received 12 written scoping comments. In general, comments supported the proposed project, but several concerns were expressed, including potential impacts outside of the current road alignment and the potential for habitat fragmentation, weed invasion, and impacts on aquatic life. Potential impacts on the viewshed, soundscape, and traffic safety from truck traffic during construction were also mentioned. Comments noted the need to address stream crossings and prevent future erosion of the reconstructed road, as well as opportunities for improving fish passage with culvert replacements. Potential impacts on floodplain utilization and hydrologic function of Kautz Creek and the Nisqually River were identified as concerns.

Review of EA. The EA was released for public review and comment on July 24, 2012; the review period ended August 23, 2012. Five EAs were distributed to local libraries. The park received two comments during the public review period – from the National Parks Conservation Association (NPCA) and the USFWS. An EA was requested by and then sent to the NPCA. The comments were generally supportive of the proposed action. None of the comments provided additional, new, or substantive information that will change the determination of effects in the EA.

NPCA generally supports the repairs and improvements to the Nisqually – Paradise Road and associated facilities and appreciates inclusion of resource protection measures to limit impacts on large trees and reduce impacts on the northern spotted owl and marbled murrelet. NPCA believes the range of alternatives evaluated in the EA is inadequate, particularly with regard to options for addressing flood flows at Kautz Creek and the use of riprap. As discussed in the *Alternatives Considered but Eliminated from Detailed Analysis* section of the EA, the park evaluated several options to protect the road and improve conveyance capacity of Kautz Creek, including adding more culverts, raising the road elevation, and constructing a bridge. Because of the dynamic nature of Kautz Creek in response to flood events and the potential for further changes in the channel course, the park determined the most cost-effective measure is to armor the road shoulder and fill slopes with riprap to protect it from periodic flood events that exceed the capacity of existing culverts. It is anticipated that 25-year or greater flood events will likely result in infrequent short-term road closures while the road is inundated, without significant impacts on visitor access. The park monitors weather and streamflow conditions and will close the road to protect public and staff safety if flooding appears likely.

NPCA also questioned the uncertainty of impacts from replacement of about 100 culverts. The number of culverts that will require replacement were conservatively estimated in the EA to evaluate potential impacts. Detailed culvert inspections will be conducted to determine the specific number of culverts that need replacement. While environmental conditions vary slightly at each location, the area of impact for each culvert replacement will be similar (210 to 230 square feet). Resource protection measures described in the Attachment B will be used to reduce impacts on aquatic resources, amphibians, wetlands, and water quality during culvert replacement. Several new culverts will provide improved fish passage.

The USFWS indicated their understanding and appreciation of the park's purpose and need for the proposed action. They agree that there are no reasonably foreseeable significant impacts that will require further evaluation in an EIS. The USFWS also expressed concerns with the selected treatment at Kautz Creek and indicated that the planned measures should be clearly noted as a temporary or interim solution that while protecting the road, they would not have a long-term benefit for the floodplain or instream processes. As described previously in the response to a NPCA comment, the park believes the proposed treatment is the best solution at this time to protect the road and stabilize the area for conveyance of flood flows. The armored roadway will allow flood flow and debris over and across the

road rather than channelization along the north ditch and concentrated flow that could wash out existing culverts. To substantially improve natural floodplain characteristics at Kautz Creek would require a bridge that spans the drainage. As noted in the EA, this project is limited to resurfacing, restoration, and repairing; thus, construction of a bridge is beyond the funding available for this project. The park will continue to monitor flows and channel dynamics in Kautz Creek to determine the need for alternative treatment in the future.

AGENCY CONSULTATION

U.S. Fish and Wildlife Service (Endangered Species Act)

The park initiated informal Section 7 consultation pursuant to the Endangered Species Act (ESA) with the U.S. Fish and Wildlife Service (USFWS) with the scoping notice on November 5, 2009, and with an individual letter on August 27, 2010. The National Oceanic and Atmospheric Administration-National Marine Fisheries Service were also contacted regarding essential fish habitat. The park submitted a biological assessment (BA) to the USFWS on March 16, 2012 for their review as part of the consultation process. An Incidental Take Statement with associated Terms and Conditions from the draft Biological Opinion (BO) was prepared by the U.S. Fish and Wildlife Service (USFWS) and received on November 14, 2012. A Biological Opinion is expected to be released in December 2012. These preliminary conclusions indicate that the selected action will have no foreseeable adverse effects to northern spotted owls, prey base, or habitat with implementation of conservation measures. The selected action will have foreseeable adverse effects to the marbled murrelet from construction related noise and visual disturbance. However, the USFWS concluded that the abandonment or failure of nests is unlikely to cause a recognizable decline in marbled murrelet abundance or productivity in the action area and will not impact murrelet habitat or have a measureable effect on the prey base or food resources for marbled murrelet. Thus, the USFWS reached a preliminary conclusion of "no jeopardy" for the marbled murrelet. The USFWS preliminary conclusions support the NPS determinations that the project may affect, but not likely adversely affect the Northern spotted owl, and may affect, and is likely to adversely affect the marbled murrelet.

The USFWS prepared draft reasonable and prudent measures (RMP) and terms and conditions (T&C) designed to minimize impacts to both species and incidental take to the marbled murrelet; the measures are provided in Attachment D. The NPS will implement these measures as part of the project and consult further with the USFWS should the Biological Opinion contain additional or modified RMPs or T&C.

Washington State Historic Preservation Officer / Advisory Council for Historic Preservation

The documents related to the National Historic Preservation Act, in accordance with the Advisory Council on Historic Preservation's regulations implementing Section 106 (36 CFR Part 800) have been completed as a separate submittal to the Washington SHPO. The park finds that the project will not alter any of the character-defining features of the road, or disturb known archeological resources. The SHPO, in a letter dated April 26, 2012, has concurred that the project will have no adverse effect on National Register-eligible or listed historic and cultural resources.

American Indian Consultation

Six federally recognized Native American tribes associated with the park were sent a scoping letter on November 5, 2009, notifying them of the proposed project. These tribes included the

Confederated Tribes and Bands of the Yakama Nation, Cowlitz Indian Tribe, Muckleshoot Indian Tribe, Nisqually Indian Tribe, Puyallup Tribe of Indians, and Squaxin Island Tribe. In addition, the park discussed the project in their annual tribal meeting and sent the tribes a copy of the EA. No comments have been received from any of the tribes.

CONCLUSION

Based on the conservation planning and environmental impact analysis documented in the EA, with due consideration of the nature of the public comments and consultations with other agencies, and given the capability of the mitigation measures to avoid, reduce, or eliminate impacts, the NPS has determined that the selected alternative does not constitute a federal action that normally requires preparation of an EIS. Environmental impacts that could occur are limited in context and intensity, with generally adverse impacts that range from localized to widespread, short- to long-term, and negligible to moderate. The selected alternative will not have a significant effect on the quality of the human environment or the park's cultural resources or natural resources.

There are no unmitigated adverse impacts on public safety, sites, or districts listed in, or eligible for listing in, the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, cumulative effects, or elements of precedence were identified. Implementation of the selected alternative will not violate any federal, state, or local environmental protection law.

Based on the foregoing, it has been determined that an EIS will not be prepared and the selected alternative may be implemented as soon as practicable.

Recommended:

Randy King/

Superintendent, Mount Rainier National Park

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Approved:

Christine S. Lehnertz

Regional Director, Pacific West Region