Redwood National Park Lower B500 Road Removal Project Determination Of Non-Impairment

While Congress has given the National Park Service (NPS) management discretion to allow impacts within parks, that discretion is limited by the statutory requirement, generally enforceable by the federal courts, that the NPS must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This cornerstone of the Organic Act establishes the primary responsibility of the NPS: to ensure that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

The impairment of park resources and values may not be allowed by the NPS unless directly and specifically provided for by legislation or by the proclamation establishing the park. The relevant legislation or proclamation must provide explicitly (not by implication or inference) for the activity, in terms that keep the Service from having the authority to manage the activity so as to avoid the impairment.

The impairment that is prohibited by the Organic Act and the General Authorities Act is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. Whether an impact meets this definition depends on the particular resources and values that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts.

An impact to any park resource or value may, but does not necessarily, constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

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

An impact would be less likely to constitute impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values and it cannot be further mitigated. An impact that may, but would not necessarily, lead to impairment may result from visitor activities; NPS administrative activities; or activities undertaken by concessioners, contractors, and others operating in the park. Impairment may also result from sources or activities outside the park.

National Park Service's *Management Policies 2006* requires analysis of potential effects to determine whether or not actions would impair park resources. The park resources and values that are subject to the no-impairment standard include:

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

Redwood National Park was established by Congress in 1968 to "preserve significant examples of the coastal redwood ... forests and the streams ... with which they are associated for purposes of public inspiration, enjoyment, and scientific study." [Public Law 90-245]. Congress expanded Redwood National Park in 1978 and authorized the NPS to develop and implement "a program for the rehabilitation of areas within ... the park" affected by past logging disturbances. [Public Law 95-250, Section 101(a) (6)]

The 1999 Redwood National and State Parks *Final General Management Plan/General Plan, Final Environmental Impact Statement/Environmental Impact Report* (RNSP GMP/FEIS) approved through the 2000 *Record of Decision* directs the park to engage in a watershed restoration program within the park to protect aquatic ecosystems from sediment delivery and protect terrestrial habitat from landslides.

The following topics from the EA were considered as measures of the condition of park watersheds and are applicable to the evaluation of removing the road for potential impairment: air quality; soils and topography; hydrology and water quality; floodplains and riparian wetlands; vegetation; fish and wildlife species that are not listed as threatened or endangered; threatened and endangered species; and cultural resources.

Non-resource topics such as visitor use, socioeconomics of gateway communities, or public health and safety are not subject to impairment determinations.

Removing the Lower B500 road will not reduce the existing impairment of soils and topography; hydrology and water quality; floodplains and riparian wetlands; vegetation; fish and wildlife species that are not listed as threatened or endangered; threatened and endangered species in the greater Prairie Creek watershed or in other tributaries outside the project area, and cultural resources. The impaired condition of these and other resources from past logging of old growth

redwood forests and road building was the primary reason for expanding Redwood National Park in 1978. The "Redwood amendment" to the General Authorities Act reiterated the non-impairment provision of the Organic Act that applies to all national park units (*Management Policies 2006* 1.4.1 and 1.4.2).

Air Quality— Removing the Lower B500 road will result in adverse impacts to air quality primarily through the generation of dust. This impact will be localized within the immediate area of operations and will be mitigated by sprinkling from water trucks to reduce the dust during equipment operations. Emissions from vehicles and equipment will be confined to the project site and mitigated through current licensing to meet state air quality standards. Dust will be a temporary localized minor adverse effect; emissions will be negligible. Accordingly, there will be no new impairment to air quality from implementing road removal activities.

Soils and Topography— Removing the Lower B500 road will not create new alterations to topography. Short-term effects on soils from erosion will be minor or negligible because of the BMPs and multiple minimization measures that will be implemented. There will be no new long-term impacts on soils or topography, which were impaired through the original clear-cut tractor-based logging and road construction.

Potential minor short-term adverse impacts from erosion will be mitigated through erosion control methods and BMPs. The minor short-term and negligible long-term adverse effects on soils are acceptable because the impacts result from an action needed to achieve objectives for restoration outlined in the 1999 GMP. Accordingly, there will be reduced impairment to soils or topography in the project area from implementing road removal activities as more natural conditions are reestablished.

Hydrology and Water Quality—Short-term adverse effects to hydrology and water quality will be avoided or minimized by incorporating multiple mitigation measures and BMPs. Standard BMPs for road removal and upgrade work would be employed to minimize or eliminate the potential for surface erosion from the project site. Ground cover would be applied on all bare soil areas within the project area and woody debris would be placed in excavated channels after primary treatments are completed.

The short-term adverse effects on water quality will be minor because of the multiple mitigation measures and BMPs that will be implemented. These minor adverse effects are unavoidable because they are necessary to achieve the restoration objectives. Implementing road removal activities will not cause new impairment to hydrology or water quality in the Lower B500 project area. In the longer-term the project will reduce impairment to hydrology through reestablishment of appropriate hydrologic flowpaths.

Floodplains and Riparian Wetlands— Removing the Lower B500 road will have a negligible effect on floodplains. Implementing road removal activities will not cause new impairment to floodplains in the project area. In the longer term, the removal of the Lower B500 road will reduce existing impairment to floodplains in the project area.

The direct adverse effect from removing the Lower B500 road on riparian wetlands will be that small isolated palustrine wetlands would be removed from excavations to improve drainage on the upgraded road segments and to restore original drainage patterns where the road is removed. The adverse effect from loss of these wetlands from restoring the original drainage pattern is negligible compared to the potential adverse effect of road and stream crossing failures that would release sediment downstream and downslope, resulting in loss of stream function, aquatic habitat, and more extensive loss of riparian wetlands. Accordingly, road removal activities will not cause new impairment to riparian wetland values and functions and in the long term will reduce existing impairment in the project area.

Vegetation Resources— Removing the Lower B500 road will have negligible short-term localized adverse effects to vegetation within the project area. Approximately 8.2 acres would be affected from road removal some of which is road surface that is not heavily vegetated. All vegetation affected is common in the park and the region. Alders would be first tree species to recolonize the restored area, followed by conifers. There will be no adverse effects on old-growth forest or residual old-growth trees from removing this road. Accordingly, implementing road removal activities will not further impair vegetation values or function and in the long term will reduce vegetation impairment in the project area.

Fish and Wildlife Resources—Loss of habitat from vegetation removal and disturbance associated with construction will be a short-term localized adverse effect on individuals of small sedentary species that cannot move out of work sites. Some individuals of aquatic species and small wildlife that are common in the area would be killed by heavy equipment. Wildlife would move back into the area following road removal. The effects on wildlife are negligible over the long-term. Accordingly, implementing road removal activities will not further impair wildlife resources in the project area.

Threatened and Endangered Species— Removing the Lower B500 road will have no effect on listed terrestrial species due to work timing restrictions and lack of effect to listed species habitat. The project is likely to adversely affect listed fish species during dewatering and relocation efforts. It was determined that these proposed activities are not likely to jeopardize the continued existence of SONCC coho salmon, CC Chinook, or NC steelhead, and are not likely to result in the destruction or adverse modification of designated critical habitat for these species. Project BMPs, i.e. timing of work and use of fish relocation protocols during removal of the bridge, will be followed to minimize impact to fish and habitat. The NOAA RC Biological Opinion authorizes incidental take for effects on listed fish related to these activities. Accordingly, implementing road removal activities will not cause further impairment to threatened wildlife and fish species that pass through the project area

Non-Impairment of Cultural Resources—There are no significant historic properties or other significant cultural resources that will be affected by removing the Lower B500 road. Implementing road removal activities will not result in impairment of cultural resources.

SUMMARY

As described above, adverse effects and environmental impacts anticipated as a result of removing the Lower B500 road on a resource or value whose conservation is necessary to fulfill

specific purposes identified in the establishing legislation or proclamation of the park, key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or identified as significant in the park's general management plan or other relevant NPS planning documents, will not rise to levels that would constitute impairment of park values and resources. It is anticipated for a number of key resources that the removal of the Lower B500 road and restoration of ecosystem function and patterns, will result in an overall reduction of impairment.