DETERMINATION OF NON-IMPAIRMENT REDWOOD CREEK TRAIL REALIGNMENT AND DIAS RIDGE TRAIL EXTENSION PROJECT

National Park Service Golden Gate National Recreation Area October 2018

NPS Management Policies 2006 (§1.4, Park Management) requires analysis of potential effects to determine whether proposed actions would impair a park's resources and values. The fundamental purpose of the national park system established by the Organic Act and reaffirmed by the General Authorities Act, as amended, mandates that NPS conserve park resources and values. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts on park resources and values. However, the laws give NPS management discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the purposes of the park, although that discretion is limited by the statutory requirement that the NPS must leave resources and values unimpaired unless a particular law directly and specifically provides otherwise.

The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. Non-resource topics are generally not subject to impairment assessment. Whether an impact could lead to impairment depends on the particular resources 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 on 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 may 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. 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.

An impairment determination is not made for all resource impact topics analyzed for the Selected Alternative. An impairment determination is not made for land use, socioeconomics, transportation and circulation, recreation and visitor use, public health and safety, and public services and utilities because impairment findings relate back to park resources and values, and these impact areas are not generally considered to be park resources or values according to the Organic Act, and cannot be impaired in the same way that an action can impair park resources and values. The following consideration of impairment only applies to the following resource impacts evaluated in the EA

which pertain to the Selected Alternative. Finally, this determination, which has been rendered solely by the park manager, applies only to NPS lands and not any adjacent areas. In the case of the Redwood Creek Trail Realignment portion of the Project, most of the affected land is in Mt. Tamalpais State Park. The affected NPS lands include the following:

- A small parcel that includes a short segment of the Redwood Creek Trail on the east side of Muir Woods Road approximately 750 feet from the road's intersection with Highway 1. On this NPS land an existing metal culvert would be removed, rock armoring would be installed to stabilize the channel, and a 26-foot long bridge would be installed across a drainage channel that leads under Muir Woods Road to Redwood Creek, west of the road
- NPS property on the east side of Highway 1, where an extension of the Dias Ridge Trail would be built between the existing Dias Ridge Trail trailhead at the Golden Gate Dairy and the existing Redwood Creek Trail trailhead near the intersection of Muir Woods Road and Highway 1.

Special Status Species

The Selected Alternative would not negatively impact local threatened or endangered species known to be in the project area, including the northern spotted owl, coho salmon, or steelhead trout. The decline of migratory fish species has been associated with a number of factors including modification of habitat, habitat loss, water pollution, over utilization (for a number of purposes, including commercial and recreational fishing), disease and predation, oceanic conditions, and drought, according to the National Oceanic and Atmospheric Association, Marine Fisheries Service's Coho Salmon Recovery Plan (NOAA 2012). The NPS, in partnership with local, state, and other federal agencies and other non-governmental organizations, have been implementing a series of projects and programs to improve and restore habitat and conditions for these species, however, this project would not have a substantial impact, beneficial or negative on them. Overall, the Redwood Creek Trail portion of the Project on State Parks land is expected to have a beneficial effect.

Vegetation

The Selected Alternative would not result in an impairment of vegetation. Vegetation surveys were conducted for both the Redwood Creek Trail Realignment and the Dias Ridge Trail Extension. No special-status plant species or special-status natural communities were identified during the surveys.

On the Redwood Creek Trail portion of the Project, an existing culvert would be removed and replaced by a bridge over a drainage leading to the creek, and the trail tread would be rehabilitated. Where trees overhang the trail, they would be trimmed to ensure a 14-foot clearance between the trail tread and the overhead trees to allow safe passage of mounted equestrians. Some trail-side vegetation may be required to establish the trail design width of 4 feet. The Dias Ridge Trail Extension portion of the Project would involve removing 13 trees for reasons of safety. These are primarily Monterey cypress (*Cupressus macrocarpa*) and are considered at-risk trees because they are diseased or otherwise in poor condition. In the historic wind row between Highway 1 and the Golden Gate Dairy, 5 healthy trees would be pruned and retained, and 8 new Monterey cypress trees planted. Impact Reduction Measures (listed in EA/IS Section 3.5) would be implemented as part of the Proposed Project. These would minimize impacts to vegetation. Several impact reduction measures would be employed to avoid the spread of invasive species. The trees would be removed and disposed of according to standard practice for trees, including diseased trees. All vegetation removal actions would occur outside of bird nesting season. New trees would be planted between the highway and the trail extension.

Vegetation removal to maintain the Redwood Creek Trail and to establish the Dias Ridge Trail Extension would be limited to that necessary to establish or restore trail tread and to ensure no overhead vegetation would impede equestrians.

Wildlife and Habitat

The Selected Alternative would not result in an impairment of wildlife habitat. Habitat in the Redwood Creek Watershed habitat has been affected by a number of factors including human modification, habitat loss, water pollution, and low water volume. Rehabilitating a portion of the Redwood Creek Trail and the development of the Dias Ridge Trail Extension would create temporary impacts during construction, but these would cease with completion of the work. Replacement of the Redwood Creek Trail culvert with a free-span bridge and rock armoring in channel would reduce sedimentation into Redwood Creek and allow better habitat connectivity in the drainage under the bridge. The NPS, in partnership with local, state, and other federal agencies and other non-governmental organizations, have been implementing a series of projects and programs to improve and restore habitat, however, the proposed action would not have a substantial impact, beneficial or negative.

Air Quality

The Selected Alternative would not result in an impairment of air quality. The number of vehicle trips associated with construction would have short-term negligible adverse impacts. A small number of additional annual visitor vehicle trips may occur once the Project is completed. The action would be consistent with the Bay Area Air Quality Management District's standards for construction.

Water Resources

The Selected Alternative would not result in an impairment of water resources. Water quality is expected to be somewhat improved by the removal of the existing culvert and its associated rock crib wall in the channel, and replacing it with a bridge spanning the drainage. The design of the rehabilitated and new trail tread would reduce erosion by ensuring sheet flow of runoff rather than concentrating it in ways that can erode soil. Any areas disturbed by construction and not part of the trail would be stabilized and revegetated.

Viewscapes

The Selected Alternative would not result in an impairment of viewscapes. The primary visual effects would be related to areas of disturbed ground and the presence of construction equipment. However, equipment and personnel required for the trail alignment and extension are expected to be minimal. Their presence would be short-term as well. The Redwood Creek Trail segment would have a negligible contribution to the visual effects on the surrounding viewshed as the trail segment would be very similar to the existing trail in terms of orientation and aesthetics. The Dias Ridge Trail Extension would be next to an existing highway, and would be visually consistent with this linear feature. It would be separated from the highway by vegetation and would largely be at a higher elevation. As flat features, trails tends to not be visually intrusive except where substantial cuts in the slope are needed to accommodate the trail or where viewers can observe the trail from a superior angle. Neither of these conditions apply to the Project. Impacts to viewscapes are expected to be negligible.

Cultural Resources

The Selected Alternative would not result in an impairment of cultural resources. The area of Redwood Creek Watershed has an important agricultural history and is an important cultural landscape and careful attention is paid to how this area is interpreted and affected by proposed

projects in relation to potential impacts to the landscape. The Project would not alter the cultural landscape in any significant way.

There are no known Native American sacred or culturally sensitive sites, locales (such as clan gathering or other cultural event), or landscapes present in the project area. Additionally, implementation of the project is extremely unlikely to disturb human remains, funerary objects, sacred objects, or objects of cultural patrimony, as defined by the Native American Graves Protection and Repatriation Act (NAGPRA).

Geology: Soils, Bedrock, Streambeds

The Selected Alternative would not result in an impairment of geology. The overall project would remove fords, crib walls, and culverts that affect Redwood Creek and its tributary drainages by creating and conveying sediment. This is a beneficial result. During trail and bridge construction activities, there would be short-term impacts due to the localized temporary effects resulting from erosion and sediment release. The impact reduction measures employed during construction would minimize or prevent these effects in the area under construction. Soil disturbance would be minimized, and disturbed areas stabilized and revegetated. The project would not affect bedrock.

Soundscapes

The Selected Alternative would not result in an impairment of soundscapes. Temporary, localized noise may occur during construction, which would be episodic and would not occur over an extended time at any one location. Very few residences are near the project. The number of additional vehicle trips generated by proposed action is minimal. Acoustically, following construction, conditions along Redwood Creek Trail and the Dias Ridge Trail Extension are expected to be similar to existing conditions.

Conclusion

The National Park Service has determined that implementation of the Selected Alternative will not constitute an impairment of the resources or values on NPS lands. This conclusion is based on consideration of the purpose and significance of Golden Gate National Recreation Area (GGNRA), a thorough analysis of the environmental impacts described in the *Redwood Creek Trail Realignment and Dias Ridge Trail Extension Project Environmental Assessment*, comments provided by the consulting agencies and the general public, and the professional judgement of the decision maker guided by the direction of the 2006 NPS *Management Policies*.

As guided by this analysis, good science and scholarship, advice from subject matter experts and others who have relevant knowledge and experience, and the results of public involvement activities, it is the Superintendent's professional judgment that there will be no impairment of park resources and values from implementing the selected action on a small parcel of GGNRA lands that includes a short segment of the Redwood Creek Trail on the east side of Muir Woods Road near the intersection with Highway 1 and GGNRA property on the east side of Highway 1, where an extension of the Dias Ridge Trail would be constructed between the existing Dias Ridge Trail trailhead and the existing Redwood Creek Trail trailhead near the intersection of Muir Woods Road and Highway 1.