

ENVIRONMENTAL ASSESSMENT FOR THE RESTORATION OF CAHOON MEADOW, SEQUOIA NATIONAL PARK

LEGISLATION, POLICIES, GUIDANCE, AND PREVIOUS PLANNING

While there are numerous laws, policies, guidance, and previous planning documents that affect the management of these parks, those most applicable to this project are listed below.

Laws and Legislation

The *NPS Organic Act of 1916* (Organic Act) (16 USC, sections 1, 2–4) and the *General Authorities Act* (16 USC 1a–8) direct the NPS to conserve the scenery, natural and historic objects, and wildlife, and to provide for the enjoyment of those resources in such a manner as to leave them unimpaired for future generations. The *Redwood Act* (16 USC, sections 1a-1) reaffirmed the mandates of the *Organic Act* and provided additional guidance on the national park system management as follows:

The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the national park system and shall not be exercised in derogation of the values and purposes for which these various areas have been established.

The *Wilderness Act of 1964* (16 USC, sections 1131-1136), established September 3, 1964, as amended 1978, established the National Wilderness Preservation System (NWPS). Wilderness is a federal designation and the highest level of protection for wildlands that are found eligible for inclusion. Wilderness lands are managed under the provisions of the Wilderness Act of 1964 “for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment of as wilderness, and to provide for the protection of these areas and the preservation of their wilderness character” (section 2(a)).

The *Clean Water Act* (33 USC, sections 1251 et seq.), passed in 1972 as amendments to the *Federal Water Pollution Control Act*, and significantly amended in 1977 and 1987, was designed to restore and maintain the integrity of the nation’s water. It furthers the objectives of restoring and maintaining the chemical, physical, and biological integrity of the nation’s waters and of eliminating the discharge of pollutants into navigable waters. It establishes effluent limitation for new and existing industrial discharge in U.S. waters; authorizes states to substitute their own water quality management plans developed under section 208 of the act for federal controls; provides an enforcement procedure for water pollution abatement; and requires conformance to permits required under section 404 for actions that may result in discharge of dredged or fill material into a tributary, wetland, or associated water source for a navigable river.

The *California Wilderness Act of 1984* (PL 98-425), authorized the addition of more than three million acres of land within the State of California, including land within SEKI, to the NWPS established by the Wilderness Act of 1964. In section 106 of the California Wilderness Act of 1984, it states that “The following lands are hereby designated as wilderness in accordance with section 3(c) of the Wilderness Act (78 Stat. 890; 16 USC 1132(c)) and shall be administered by the Secretary of the Interior in accordance with the applicable provisions of the Wilderness Act.” In section 106(2), it states “Sequoia and Kings Canyon National Parks Wilderness, comprising approximately seven hundred and thirty-six thousand nine hundred and eighty acres, as generally depicted on a map entitled ‘Wilderness Plan –

Sequoia-Kings Canyon National Parks – California’, numbered 102-20, 003-E and dated July 1980, and shall be known as the Sequoia-Kings Canyon Wilderness.”

The *National Park Omnibus Management Act of 1998* (16 USC 5901-6011; PL 105-391) states that in part the purpose of the law’s second section (Title II) is: “to enhance management and protection of national park resources by providing clear authority and direction for the conduct of scientific study in the National Park System and to use the information gathered for management purposes; to ensure appropriate documentation of resource conditions in the National Park System.”

The *Omnibus Public Land Management Act of 2009* (PL 111-11), passed on March 30, 2009, designated 52 new wilderness areas and added acreage to 26 existing areas in the United States, adding a total of more than 2 million acres to the NWPS. In SEKI, this act established the John Krebs Wilderness and expanded the Sequoia-Kings Canyon Wilderness. In section 1902(1(a)) of the Omnibus Public Land Management Act, the John Krebs Wilderness was designated in SEKI, comprising approximately 39,740 acres of land, and 130 acres of potential wilderness additions. In section 1902(2), the Sequoia-Kings Canyon Wilderness was expanded, and an additional 45,186 acres was incorporated into this wilderness.

Executive Order 11988 (*Floodplain Management*) requires an examination of impacts to floodplains and the potential risk involved in placing facilities within floodplains. The NPS *Management Policies 2006*, and Director’s Order – 77-2, provide guidelines for proposed actions in floodplains. It is NPS policy to preserve floodplain values and minimize potentially hazardous conditions associated with flooding.

Executive Order 11990 (*Protection of Wetlands*) requires federal agencies to avoid, where possible, adversely impacting wetlands. Further, Section 404 of the *Clean Water Act* authorizes the U.S. Army Corps of Engineers to prohibit or regulate, through a permitting process, discharge or dredged or fill material or excavation within waters of the United States. NPS policies for wetlands, as stated in the NPS *Management Policies 2006*, *Director’s Order 77-1: Wetlands Protection*, and *Procedural Manual 77-1: wetland Protection*, strive to prevent the loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands.

Relevant State Legislation

The CEQA (California Public Resources Code, Section 21000 et seq.), was passed in 1970, in response to the passage of the NEPA. CEQA is California’s broadest environmental law and requires state and local agencies to identify the significant impacts of their actions and to avoid or mitigate those impacts, if feasible. CEQA applies to all discretionary projects proposed to be conducted or approved by a California public agency, including private projects requiring discretionary government approval. Federally sponsored and financed projects involving a state or local agency and a federal agency are subject to both NEPA and CEQA review. This project will be reviewed under both NEPA and CEQA because action alternatives would require obtaining permits from the state.

The *Porter-Cologne Water Quality Control Act* established the State Water Resources Control Board (SWRCB) and each Regional Water Quality Control Board (RWQCB) as the principal state agencies for having primary responsibility in coordinating and controlling water quality in California. The SWRCB has the ultimate authority over state water rights and water quality policy. The Act also established nine RWQCBs to oversee water quality on a day-to-day basis at the local/regional level.

NPS Policies and Guidance

National Park Service *Management Policies 2006* (4.1) states: “Natural resources will be managed to preserve fundamental physical and biological processes, as well as individual species, features, and plant

and animal communities. The Service will not intervene in natural biological or physical processes, except (1) when directed by Congress; (2) in emergencies in which human life and property are at stake; (3) to restore natural ecosystem functioning that has been disrupted by past or ongoing human activities; or, (4) when a park plan has identified the intervention as necessary to protect other park resources, human health and safety or facilities. Natural systems in the national park system, and the human influences upon them, will be monitored to detect change. The Service will evaluate possible causes and effects of changes that might cause impacts on park resources and values. The Service will use the results of monitoring and research to understand the detected change and to develop appropriate management actions.”

NPS *Management Policies 2006* (4.1) also states: “Biological or physical processes altered in the past by human activities may need to be actively managed to restore them to a natural condition or to maintain the closest approximation of the natural condition when a truly natural system is no longer attainable. . . . Decisions about the extent and degree of management actions taken to protect or restore park ecosystems or their components will be based on clearly articulated, well-supported management objectives and the best scientific information available.”

NPS *Management Policies 2006* (4.1.5) states that “Impacts on natural system resulting from human disturbances include the introduction of exotic species; the contamination of air, water, and soil; changes to hydrologic patterns and sediment transport; the acceleration of erosion and sedimentation; and the disruption of natural processes. The Service will seek to return such disturbed areas to the natural conditions and processes characteristic of the ecological zone in which the damaged resources are situated.”

Per 4.4.2.4 of NPS *Management Policies 2006*, “Landscape and vegetation conditions altered by human activity may be manipulated where the park management plan provides for restoring the lands to a natural condition. Management activities to restore human-altered landscapes may include, but are not restricted to: . . . restoring natural topographic gradients, and revegetating with native park species on acquired inholdings. . . . maintaining open areas and meadows in situations in which they were formerly maintained by natural processes that now are altered by human activities.”

In regards to wetlands, section 4.6.5 of NPS *Management Policies 2006* states that “The Service will (1) provide leadership and take action to prevent the destruction, loss, or degradation of wetlands; (2) preserve and enhance the natural and beneficial values of wetlands; and, (3) avoid direct and indirect support of new construction in wetlands unless there are no practicable alternatives and the proposed action includes all practicable measures to minimize harm to wetlands.” Also, “When natural wetland characteristics or functions have been degraded or lost due to previous or ongoing human actions, the Service will, to the extent practicable, restore them to redisturbance conditions.”

Per watershed and stream processes (4.6.6 of NPS *Management Policies 2006*) “The Service will manage watersheds as complete hydrologic systems and minimize human-caused disturbance to the natural upland processes that deliver water, sediment, and woody debris to streams. These processes include runoff, erosion, and disturbance to vegetation and soil caused by fire, insects, meteorological events, and mass movements.”

In regards to wilderness and the minimum requirement content, section 6.3.5 of NPS *Management Policies 2006* states “When determining the minimum requirements, the potential disruption of wilderness character and resources will be considered before, and given significantly more weight than, economic efficiency and convenience. If a compromise of wilderness resources or character is unavoidable, only those actions that preserve wilderness character and/or have localized, short-term adverse impacts will be acceptable.” Per 6.3.7 of the policies, “Management intervention should only be

undertaken to the extent necessary to correct past mistakes, the impacts of human use, and influences originating outside of wilderness boundaries.”

Director’s Order 12: Conservation Planning, Environmental Impact Analysis and Decision-Making (DO-12), and accompanying Handbook, set forth the policy and procedures by which the NPS carries out its responsibilities under the *National Environmental Policy Act* (NEPA). DO-12 is the governing policy and procedures for how the NPS complies with NEPA. The DO-12 and Handbook lay the groundwork for the way the NPS approaches environmental analysis, public involvement, and resource-based decision-making. In fall 2015, the NPS revised the Handbook to incorporate new requirements and practices that emphasize the need for concise, focused, and timely NEPA reviews and documentation. These revisions were made in response to new requirements and guidance issued since the previous Handbook was approved in 2001, the need to streamline NPS practices in response to current efforts to modernize Federal agency implementation of NEPA, and the need to improve impact analyses in response to lessons learned over the past 14 years.

PREVIOUS PLANNING AND OTHER GUIDANCE

This section includes a summary of existing and ongoing park plans that are pertinent to the Cahoon Meadow proposal.

The *Sequoia and Kings Canyon National Parks Wilderness Stewardship Plan* (WSP) (2015) establishes a framework for managing wilderness and areas managed as wilderness within SEKI to: preserve wilderness character; provide opportunities for and encourage public use and enjoyment of wilderness in accordance with the Wilderness Act and other laws and policies; improve conditions in areas where there may be unacceptable levels of impacts on wilderness character; and, protect the natural and cultural resources within wilderness. The purposes of the WSP include implementing the long-term vision for protecting wilderness character that is contained in the parks’ *Final General Management Plan / Final Environmental Impact Statement* (GMP/FEIS) (2007), as well as enhancing established programs and actions for managing these areas as wilderness.

The parks’ GMP /FEIS (2007) establishes a vision for what the parks should be, including desired future conditions for natural and cultural resources. Desired conditions expressed in the GMP that are relevant to this planning effort include:

- NPS-managed natural systems, and the human influences upon them, will be monitored to detect any significant changes. Action will be taken in the case of such changes, based on the type and extent of change.
- Maintain all the components and processes of naturally evolving park ecosystems.
- Intervention in natural biological or physical processes will be allowed only (1) when directed by Congress, (2) in some emergencies when human life and property are at stake, or (3) to restore native ecosystem functioning that has been disrupted by past or ongoing human activities.
- The NPS will re-establish natural functions and processes in human-disturbed natural systems in the parks unless otherwise directed by Congress. . . . The Park Service will restore the biological and physical components of these systems as necessary, accelerating both their recovery and the recovery of landscape and community structure and function. . . . The Park Service will seek to return (human-disturbed) areas to conditions and processes representing the ecological zone in which the damaged resources are situated.
- Revegetation efforts will use seeds, cuttings, or transplants representing species and gene pools native to the ecological portion of the park in which the restoration project is occurring.

- The NPS will actively seek to understand and preserve the soil resources of parks, and to prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soils, or its contamination of other resources.
- The natural and beneficial values of wetlands are preserved and enhanced.
- The administration of wilderness meets the standards within the Wilderness Act, including (1) protection of these areas in an unimpaired state for future use and enjoyment as wilderness; and preservation of the wilderness character of these areas; and, (2) wilderness is protected and managed so as to preserve its natural conditions and which: generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; and, has outstanding opportunities for solitude or a primitive and unconfined type of recreation.

The 1999 *Natural Cultural Resources Management Plan* (RMP) currently serves as the foundation for the parks' resource stewardship programs. Park staff is updating the 1999 RMP with a Resource Stewardship Strategy (RSS). The RSS will recommend science- and scholarship-based approaches to achieve and maintain the desired conditions of the parks' natural and cultural resources. It will focus on ways to conserve natural and cultural resources in an era of rapid change and uncertain conditions.

The 1999 RMP (pg. 66), identified Cahoon Meadow as a location for active meadow restoration as a strategy for achieving desired future conditions. It states "Actively restore meadows known to have departed significantly from natural conditions due to human influences, and that would not return to those conditions without intervention, to a naturally functioning state to the greatest extent possible. One extreme example is Cahoon Meadow, which continues to show active head cutting and accelerated erosion as a result of a discontinued cattle-grazing allotment."