

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
DIRECTOR'S OFFICE
POST OFFICE BOX 944209
SACRAMENTO, CA 94244-2090



**CALIFORNIA ENVIRONMENTAL QUALITY ACT STATUTORY EXEMPTION FOR
RESTORATION PROJECTS
CONCURRENCE NO. 21080.56-2024-055-R3**

Project: Lodge Road Wildfire Resilience and Large Tree Restoration Demonstration Project
Location: Santa Cruz County
Lead Agency: California Department of Parks and Recreation
Lead Agency Contact: Tim Hyland; tim.hyland@parks.ca.gov

Background

Project Location: The Lodge Road Wildfire Resilience and Large Tree Restoration Demonstration Project (Project) is located within Big Basin Redwood State Park, owned and operated by California Department of Parks and Recreation (State Parks), in Santa Cruz County, California. The Project area is approximately 54 acres and comprised of four treatment units adjacent to Lodge Road, approximately centered at coordinates 37.178582, -122.192392; Assessor Parcel Numbers 086-011-27, 086-041-59, 086-041-60, 086-014-61, and 086-041-62. The Project area consists of second-growth coast redwood (*Sequoia sempervirens*), Douglas fir (*Pseudotsuga menziesii*), and tanoak (*Notholithocarpus densiflorus*) forest.

Project Description: State Parks proposes to conserve, restore, protect, or enhance, and assist in the recovery of California native fish and wildlife, and the habitat upon which they depend and to restore or provide habitat for California native fish and wildlife. In 2020, the San Mateo-Santa Cruz Unit Lightning Complex Fire (CZU Fire) impacted Big Basin Redwood State Park (Big Basin) and the surrounding landscape; numbers of hardwoods, Douglas-fir, and many small to mid-range diameter second-growth redwoods perished as a result. Existing dense stand structures in combination with extreme weather, historic anthropogenic influences such as clearcutting, and other factors exacerbated fire conditions. Additionally, approximately 70 percent of marbled murrelet (*Brachyramphus marmoratus*) breeding habitat in the Santa Cruz Mountains was lost as a direct result of the CZU Fire.

Although the impact to the forest ecosystems of Big Basin was significant, this disturbance is part of the natural cycle of disturbance that occurs in coast redwood forests, which results in significant changes to the forest characteristic development, such as increased snags, additional structure of old growth trees, downed woody debris, large woody debris contribution to the stream systems, nutrient additions to the soil, understory development of nitrogen fixing plants, basal sprouting from live root systems, and increased extent of

sensitive plant communities. The unprecedented disturbance resulting from the CZU Fire left behind variable post-fire-conditions, creating an opportunity to demonstrate how ecologically restorative treatments can be applied to reduce historic impacts, increase resilience to future wildfire, and promote ecosystem health resiliency to the effects of climate change.

The Project will implement restoration treatments including selective removal of dead and dying mid-range diameter (up to an approximately 24-inch diameter at breast height [DBH]) second-growth redwoods to accelerate growth of healthy larger second-growth trees through manual removal and with the use of heavy equipment for mechanical removal. Treatments also include reduction of understory vegetation, small to mid-range trees, and dead standing hardwoods; and prescribed burning including pile burning and broadcast burning, intended to promote the structural diversity of forest stands, increase understory plant diversity, and reduce the risk of future extreme fire behavior. The Project area contains four treatment units that have been delineated by vegetative species composition and require site-specific restorative treatments as described below:

- **Redwood Unit A** is approximately 24.4 acres and will be treated by selective thinning redwood trees of approximately 12 to 24-inch DBH, removal of all dead trees and vegetation less than or equal to 12-inch DBH within 50 feet of redwood groves and/or roads, and removal of all dead hardwoods of any size that are a hazard to redwood groves or increase the risk of increased fire intensity in proximity to redwoods. Understory vegetation not marked for retention will be masticated. Broadcast burning, including necessary site preparation, will be implemented in designated areas of the unit, and hardwood trees between approximately 12 to 24-inch DBH may be bucked and piled for pile burning in designated locations within the unit.
- **Redwood Unit B** is approximately 10.3 acres and will be treated by thinning all redwoods less than or equal to 24-inch DBH, removal of all dead hardwood trees less than 16-inch DBH, tractor crushing dead hardwood trees less than 12-inch DBH, and tractor crushing all dead trees less than 12-inch DBH within 50 feet of roads. Understory vegetation may be crushed by tracked equipment. Broadcast burning will be implemented, including necessary site preparation.
- **Hardwood Unit** is approximately 11.6 acres and will be treated by removing all dead hardwood trees located within redwood groves, within 50 feet of redwood groves, within 50 feet of individual redwood trees greater than 24-inch DBH, within 50 feet of roads, and within 50 feet of live mature hardwood trees greater than 20-inch DBH. Hardwood trees greater than 12-inch DBH will be transferred to a decking location for disposal or piled for pile burning in designated locations within the unit. Hardwood trees less than 12-inch DBH will be masticated, and understory vegetation may be crushed by equipment.
- **Prescribed Burn Unit** is approximately 8.3 acres and overlaps with approximately 3.54 acres of Redwood Unit A and Redwood Unit B. Prior to restorative broadcast burning treatments, preparation of the site will include mastication of dead trees up to 12-inch DBH within 25 feet from the edge of the control line, removal of dead trees of any size within 50 feet of control line, and mastication of vegetation and trees up to 12-inch DBH along the designated control line ridge. All felled trees will be felled toward the interior of the burn unit or removed from the unit. Broadcast burning of the unit will include controlled application of fire to fuels, allowing fire to be confined to the

predetermined area and will consider specific conditions such as temperature, relative humidity, and wind speed prior to implementation.

The Project will collect data needed to evaluate ecosystem response to the proposed restorative treatments and will provide opportunities to educate the public. Future maintenance plans, treatment prescriptions, and treatment frequency will be informed by long-term monitoring of site conditions using Forest Trend Plots (FTP). Over 200 FTPs have been installed across the four treatment units within the Project to monitor forest conditions before and after the implementation of restorative treatments. Long-term implementation of the restoration Project will also include repeated, periodic prescribed burning to retain understory diversity and to limit ladder fuel by reducing small diameter stems across the Project site. State Parks intends to maintain a fire return interval of 7-15 years within the Project area, which is consistent with reconstructed historical fire frequencies in the Santa Cruz Mountains, however, the fire return interval may be adjusted if data from the FTPs suggests that fuel loads reach an excessive level that could negatively impact the goals and objectives of the Project. Additionally, State Parks will remove high-priority invasive species throughout the Project as part of ongoing maintenance; methods for invasive removal include mechanical, manual, and chemical methods.

The Project will provide multiple environmental benefits, including habitat improvement, wildfire resilience, and improved forest conditions through planned forest density reductions, understory treatments, and prescribed burning. These treatments will support marbled murrelets, which are listed as threatened under the Federal Endangered Species Act (ESA) and endangered under the California Endangered Species Act (CESA), through the development of habitat conditions within the forest canopy of the Project site, as well as improve heterogeneous forest structure and understory conditions to support habitat for native plant and animal species, such as huckleberry (*Vaccinium ovatum*), evergreen violet (*Viola sempervirens*), unsilvered fritillary (*Speyeria adiastrae*), and Townsend's big-eared bat (*Corynorhinus townsendii*). The Project's restorative treatments will result in increased wildfire resilience and carbon sequestration, and will increase habitat quality and connectivity to existing habitat for marbled murrelet and other native species by promoting growth in larger trees to develop late-seral redwood forest.

Tribal Engagement: Tribal engagement began in 2021 with development of the Advisory Committee for the Reimagining Basin Vision Process in which representatives of Amah Mutsun Tribal Band and Muwekma Ohlone tribes gave input on forest stewardship priorities through group meetings and direct conversations. Additionally, the Association of Ramaytush Ohlone, Amah Mutsun Tribal Band, and the Muwekma Ohlone Tribe were identified on the Native American Heritage Commission (NAHC) contact list for the Project and were contacted by the State Parks qualified archaeologist and tribal liaison. The Association of Ramaytush Ohlone responded to that State Parks contact with questions and State Parks responded to those questions. Continued engagement and additional outreach are planned for all three identified tribes. Separate site visits have been planned with the Association of Ramaytush Ohlone and Amah Mutsun Tribal Band in June of 2024 to discuss cultural and resource management concerns broadly throughout Big Basin and specifically for the Project. Any additional recommended cultural resource protection measures will be documented and implemented as part of the Project as feasible. State Parks has dedicated a qualified

archaeologist to the Project, who has completed a records search for pre-historic and historic resources Best Management Practices (BMPs), and operation conditions are outlined in the Project specifications and will be implemented as part of the Project.

Interested Party Coordination: State Parks has continued to actively engage the public, partnering agencies, and other interested parties on forest management plans for Big Basin since the CZU Fire. State Parks began engagement in 2021 and has held a series of webinars and public meetings to formulate the vision for the post-fire future of Big Basin. A public in-person Vision Summary meeting was held in June of 2022, included a discussion of forest management goals, strategies, and proposed Project treatments to solicit public input. A Reimagining Vision Summary and a compendium of the community engagement was documented and is available online. In 2021, State Parks also led a Santa Cruz Mountain Stewardship Network tour of Big Basin with members of the Santa Cruz Mountain Stewardship Network, which involved representatives from over 25 organizations, including land trusts, parks and open space districts, resource conservation districts, the Amah Mutsun Tribal Band, and others involved in stewardship of natural resources in the Santa Cruz Mountains. The tour focused on post-fire forest management proposed for the Project site; consulting foresters and State Parks staff presented the restoration goals and the proposed scope of the Project. State Parks has continued to engage the public and interested parties (including representatives from organizations including Sierra Club and the Center for Biological Diversity) through focused surveys and meetings to develop more specific plans for Big Basin. In February of 2024, another public in-person meeting was held to present Project information to the community, and a complete summary of community engagement is documented in the public draft of Reimagining Big Basin Facilities Management Plan and is available online. In March of 2024, State Parks led a publicly noticed Parks and Recreation Commission tour of Big Basin with Parks and Recreation Commissioners, partners, and members of the public, to highlight future plans for Big Basin which included the Project.

Anticipated Project Implementation Timeframes:

Start date: August 2024

Completion date: December 2032

Lead Agency Request for CDFW Concurrence: On May 24, 2024, the Director of the California Department of Fish and Wildlife (CDFW Director) received a concurrence request from State Parks (Lead Agency) pursuant to Public Resources Code section 21080.56, subdivision (e) (Request). The Request seeks the CDFW Director's concurrence with the Lead Agency's determination on May 24, 2024, that the Project meets certain qualifying criteria set forth in subdivisions (a) to (d), inclusive, of the same section of the Public Resources Code (Lead Agency Determination). The CDFW Director's concurrence is required for the Lead Agency to approve the Project relying on this section of the California Environmental Quality Act (CEQA). (Pub. Resources Code, § 21000 et seq.).

Concurrence Determination

The CDFW Director concurs with the Lead Agency Determination that the Project meets the qualifying criteria set forth in Public Resources Code section 21080.56, subdivisions (a) to (d), inclusive (Concurrence).

Specifically, the CDFW Director concurs with the Lead Agency that the Project meets all of the following conditions: (1) the Project is exclusively to conserve, restore, protect, or enhance, and assist in the recovery of California native fish and wildlife, and the habitat upon which they depend; or is exclusively to restore or provide habitat for California native fish and wildlife; (2) the Project may have public benefits incidental to the Project's fundamental purpose; (3) the Project will result in long-term net benefits to climate resiliency, biodiversity, and sensitive species recovery; and includes procedures and ongoing management for the protection of the environment; and (4) Project construction activities are solely related to habitat restoration. Pursuant to Public Resources Code section 21080.56, subdivision (g), CDFW will post this Concurrence on its CEQA Notices and Documents internet page: <https://wildlife.ca.gov/Notices/CEQA>.

This Concurrence is based on best available science and supported, as described below, by substantial evidence in CDFW's administrative record of proceedings for the Project.

This Concurrence is also based on a finding that the Project is consistent with and that its implementation will further CDFW's mandate as California's trustee agency for fish and wildlife, including the responsibility to hold and manage these resources in trust for all the people of California.

Discussion

- A. Pursuant to Public Resources Code section 21080.56, subdivision (a), the CDFW Director concurs with the Lead Agency that the Project will exclusively conserve, restore, protect, or enhance, and assist in the recovery of California native fish and wildlife, and the habitat upon which they depend; or restore or provide habitat for California native fish and wildlife.

The Project will implement restorative treatments within the forest units adjacent to Lodge Road and will assist in the recovery of California native fish and wildlife and enhance the habitat upon which they depend by creating future redwood forest conditions suitable for many native plant and wildlife species that inhabit the Project area. By accelerating development of late seral forest characteristics, forestlands within the Project will contain greater numbers of large trees which marbled murrelet are known to inhabit and will increase habitat quality and connectivity to existing marbled murrelet habitat within Big Basin. Treatment will also reduce forest canopy density and will create larger canopy openings and more complex mid-story habitat in the form of tree cavities, enhancing nesting and roosting habitat for native raptors, other bird species, and bats. Canopy density reduction will allow sunlight to reach the forest floor to improve understory diversity of native plant species such as huckleberry, evergreen violet, chain fern (*Woodwardia* sp.), sedges (*Carex* sp.), rushes (*Juncus*

sp.), elderberry (*Sambucus* sp.), and Pacific dogwood (*Cornus nuttallii*). Downed woody debris left from treatment operations will provide complex habitat for small mammals and amphibian species such as California red-legged frog (*Rana draytonii*, CRLF). Implementation of forest density reduction, understory treatments, and prescribed fire will develop habitat within the Project site that has greater resilience to wildfire and other climate-driven disturbances, and that increases habitat quality and connectivity throughout Big Basin.

- B. Pursuant to Public Resources Code section 21080.56, subdivision (b), the CDFW Director concurs with the Lead Agency that the Project may have incidental public benefits, such as public access and recreation.

The Project will have incidental education and public access benefits. The Project will remove hazardous standing dead trees near Lodge Road, creating safer public access conditions. Furthermore, the Project will be used to for public education purposes to demonstrate the value of advancing development of late seral forest conditions through restorative treatments such as mid-range diameter tree density reduction, understory treatments, and prescribed fire.

- C. Pursuant to Public Resources Code section 21080.56, subdivision (c), the CDFW Director concurs with the Lead Agency that the Project will result in long-term net benefits to climate resiliency, biodiversity, and sensitive species recovery, and includes procedures and ongoing management for the protection of the environment.

Long-term Net Benefits to Climate Resiliency: The Project will result in long-term climate resiliency by promoting the development of larger trees and late seral forest conditions, reducing the risk of high severity wildfire, reestablishing pre-colonial fire regimes, decreasing the likelihood of large-scale vegetation type conversion, and providing long-term carbon sequestration. The Project will preserve a suite of ecosystem processes provided by forestlands, including resiliency to the predicted drier, hotter climates, and more frequent wildfire, drought, and plant pathogens. These processes are critical in maintaining and sustaining vegetation structure and community dynamics, wildlife habitats, and wildlife population health. Restorative treatments implemented under this Project, when combined with long-term maintenance and prescribed burning, promote the growth of larger trees that are more resilient to climate driven disturbances. Findings from the FTPs following the CZU Fire suggest that forest stands with fewer trees per acre and larger diameter trees experienced increased resilience to wildfire, whereas stands with higher densities of small diameter trees experienced increased mortality. Additionally, the Project's improvements to carbon storage may provide future benefits to climate resilience.

Long-term Net Benefits to Biodiversity: The Project will result in long-term net benefits to biodiversity by increasing landscape heterogeneity in redwood and hardwood forest stands within Big Basin. Forest density reduction of small and mid-range diameter trees will include measures to preserve existing species composition and promote the health and vigor of the residual forest stand. Forest density reductions will increase average canopy gaps and increase sunlight to the forest floor to support diverse

understory plant and fungal species such as redwood sorrel (*Oxalis oregana*), western sword fern (*Polystichum munitum*), huckleberry, woodland strawberry (*Fragaria vesca*), and evergreen violet, and will provide a heterogeneous distribution of shading, snags, and downed woody debris. By enhancing landscape heterogeneity, the Project aims to increase the diversity of forest habitats, supporting a wider variety of wildlife species, including hoary bat (*Lasiurus cinereus*), Townsend's big-eared bat, marbled murrelet, and nesting bird species. Increased large wood on the forest floor will also provide habitat for amphibian species, including California red-legged frog, California giant salamander (*Dicamptodon ensatus*), California newt (*Taricha tarosa*), ensatina (*Ensatina eschscholtzii*), and other native wildlife species.

During operations, measures will be taken to prevent the introduction and spread of invasive species such as French broom (*Genista monspessulana*) and jubata grass (*Cortaderia jubata*). Any increase in persistent invasive plant species that may become established will be controlled as part of the Project's ongoing natural resource maintenance activities. Additionally, prescribed burning will be conducted periodically to maintain a diverse native understory vegetation structure and composition.

Long-term Net Benefits to Sensitive Species Recovery: The Project will result in long-term net benefits to sensitive species recovery by promoting the development of late-seral forest conditions to support habitat for many native species, including marbled murrelet. Implementation of restorative forest health treatments will increase the growth and wildfire resilience of residual redwood stands within Big Basin and improve habitat conditions for marbled murrelet in the southern extent of the species range within coastal California. Over time, residual redwoods will grow and develop larger branches in the canopy which are preferred nesting habitat for marbled murrelet. Development and growth of residual redwood stands within the Project area will create greater connectivity to existing late-seral old-growth stands within and adjacent to Big Basin and will benefit all native species that inhabit the area and rely on late-seral forest conditions.

The Project will also promote increased canopy gaps through density reductions and prescribed fire, supporting and enhancing habitat for California red-legged frog, California giant salamander, California newt, and Ensatina. Increased sunlight from canopy gaps will also promote growth of both unsilvered fritillary and its larval host plant, the evergreen violet. Prescribed fire will expand and create basal hollows and cavities in redwood trees and snags increasing roosting habitat for Townsend's big-eared bat and hoary bat, and nesting habitat for native bird species. Additionally, the Project will increase the abundance and diversity of understory plants, increasing the abundance of food available for invertebrates which are a common food source for native amphibians, including CRLF.

Procedures for the Protection of the Environment: Avoidance, minimization, and conservation measures will be implemented during the Project to avoid and minimize impacts to sensitive resources and to protect the environment to the greatest extent feasible. Established BMPs and California Board of Forestry's Forest Practice Rules and operational standards will be implemented as part of the Project and include

protection from vegetation disturbance in the Watercourse and Lake Protection Zones as appropriate, erosion and dust control measures, and inspections for wildlife and equipment leaks prior to implementation of the Project. Additional measures are incorporated into the Project to avoid damage to retained trees, prevent introduction and spread of invasive species, for spill prevention, and for equipment fueling and maintenance off-site.

Implementing the Project will be subject to additional avoidance and minimization measures related to sensitive species and include, but are not limited to:

- Nesting bird and bat roost surveys will be conducted from February 15 to August 1 within 7-14 days of any mechanical or manual treatments to determine if nesting activity is occurring. Buffers will be established around identified nesting sites during nesting season.
- Mechanized operations will not occur between March 23 and August 5 to avoid potential impacts to marbled murrelet.
- Required biological training will be provided for contractors and employees working within the Project site, including appropriate work practices necessary to effectively implement biological avoidance measures and to comply with the applicable environmental laws and regulations.
- Any CESA- or ESA-listed plant or animals encountered may require work stoppage, and additional operation buffers around non-listed special status plant species and animals within the Project area.
- Predicted precipitation events and conditions in which saturated soil may increase erosion and impacts to CRLF habitat may require work stoppage.
- All staging areas and fueling or maintenance of vehicles and equipment will occur outside of sensitive habitat areas including water bodies, drainages, and riparian habitat.
- Firing techniques and prescribed burn operations will be designed to avoid entrapment of wildlife and will primarily rely on backing fires that move slowly and provide wildlife the opportunity to escape areas of active fire. If sensitive wildlife species are discovered during burn operations, the burn boss will shift work to avoid or minimize impacts to the wildlife as appropriate.

Additionally, noise and impact avoidance for marbled murrelet will be implemented and is consistent with the Avoidance Measure Recommendations for Marbled Murrelets in the Santa Cruz Mountains Following the CZU Lightning Complex report, developed by State Parks in consultation with CDFW and the United States Fish & Wildlife Service (USFWS). Guidance and recommendations provided in this report consider and incorporate results from a sound study conducted for various equipment types per the Pacific Seabird Group protocols.

Ongoing Management for the Protection of the Environment: State Parks plans to conduct periodic prescribed burning to maintain a mosaic of understory conditions in line with the Project objectives. To maintain consistency with the Forest Management Strategy's goals of adaptive management and monitoring, long-term FTP monitoring will also be conducted throughout the life of the Project to monitor forest conditions over time, and determine when future restorative treatments may be needed, as well

as inform public outreach and education. State Parks also developed a Vegetation Management Statement which outlines continued invasive species management and ongoing maintenance for the Project area.

- D. Pursuant to Public Resources Code section 21080.56, subdivision (d), the CDFW Director concurs with the Lead Agency that the Project does not include any construction activities, except those solely related to habitat restoration.

All Project activities are solely related to the overall goal of the Project to restore forest habitat heterogeneity and improve wildfire resilience and late-seral forest conditions. Use of heavy equipment is exclusively for forest density reductions, understory treatments, and native species habitat enhancements. No new roads will be constructed as part of the Project.


Scope and Reservation of Concurrence

This Concurrence is based on the proposed Project as described by the Lead Agency Determination and the Request. If there are any subsequent changes to the Project that affect or otherwise change the Lead Agency Determination, the Lead Agency, or any other public agency that proposes to carry out or approve the Project, shall submit a new lead agency determination and request for concurrence from CDFW pursuant to Public Resources Code section 21080.56. If any other public agency proposes to carry out or approve the Project subsequent to the effective date of this Concurrence, this Concurrence shall remain in effect and no separate concurrence from CDFW shall be required so long as the other public agency is carrying out or approving the Project as described by the Lead Agency Determination and the Request.

Other Legal Obligations

The Project shall remain subject to all other applicable federal, state, and local laws and regulations, and this Concurrence shall not weaken or violate any applicable environmental or public health standards. (Pub. Resources Code, § 21080.56, subd. (f).)

CDFW Director's Certification

By: 
Charlton H. Bonham, Director
California Department of Fish and Wildlife

Date: July 24, 2024