

DOCKETED

Docket Number:	23-OPT-01
Project Title:	Fountain Wind Project
TN #:	249927
Document Title:	fwp_bio-002_005_026_027_030_spotted_owl_memo
Description:	N/A
Filer:	Caitlin Barns
Organization:	Stantec Consulting Services, Inc.
Submitter Role:	Applicant Consultant
Submission Date:	5/1/2023 12:10:36 PM
Docketed Date:	5/1/2023



ENVIRONMENTAL & STATISTICAL CONSULTANTS

2725 NW Walnut Blvd., Corvallis, OR 97330
Phone: 575-802-3959 ♦ www.west-inc.com ♦ Fax: 307-637-6981

TECHNICAL MEMORANDUM

DATE: April 14, 2023

TO: Leonidas Payne, California Energy Commission

FROM: Joel Thompson, Western EcoSystems Technology, Inc.

RE: Spotted Owl Status Assessment for the Proposed Fountain Wind Project, Shasta County, California

INTRODUCTION

In January 2023, CG Fountain Wind LLC (Fountain Wind) submitted an Opt-in Application for Certification to the California Energy Commission (CEC) for the proposed Fountain Wind Project (Project; Docket Number 23-OPT-01)(Project). Upon review of the application materials, the CEC requested additional data and/or inputs relative to surveys for northern spotted owl (NSO; *Strix occidentalis caurina*) and California spotted owl (CSO; *S. occidentalis occidentalis*); data Request Numbers BIO-002, BIO-005, BIO-026, BIO-027, and BIO-030. In response to these inquiries, Western EcoSystems Technology, Inc. (WEST) prepared this memo to clarify the status of both subspecies and summarize the historical data from the region for both NSO and CSO. Additional information on the current regulatory environment regarding management of these subspecies in this region of California is also provided.

BACKGROUND ON PROJECT AREA

The Project is located entirely on privately owned timberlands to the south of California State Route 299 between the communities of Burney and Montgomery Creek. The Lassen National Forest abuts a portion of the Project to the southeast, while the majority of lands surrounding the Project are privately owned and managed for commercial timber production.

In late August 1992, the Fountain Fire burned approximately 64,000 ac (25,900 ha) in and around the Project, including roughly the northern half of the Project. Post-fire management included salvage logging, site preparation, and planting in the year following the fire. In the 31 years since the fire, the previously burned areas within the Project Site are now predominantly covered by dense stands of regenerating, early-seral conifer forest. Management activities in the burned areas is primarily restricted to pre-commercial thinning, while commercial timber harvest

operations are currently being conducted only within the southern/eastern portions of the Project, much of which has been harvested already.

The dominant vegetation type in and around the Project area is mixed coniferous forest (both post-fire and unburned), with smaller amounts of mixed montane chaparral and mixed montane riparian forest/scrub. Because the primary land use in this area is commercial timber production, the landscape is highly fragmented with no large tracts of undisturbed wildlife habitat remaining within the managed timberlands in and around the Project. It is anticipated that commercial timber operations will continue to alter the landscape within and surrounding the Project Site for the foreseeable future and thus the habitat will continue to be highly disturbed. Dominant overstory species include a combination of white fir (*Abies concolor*), Douglas fir (*Pseudotsuga menziesii*), incense cedar (*Calocedrus decurrens*), ponderosa pine (*Pinus ponderosa*), sugar pine (*P. lambertiana*), and California black oak (*Quercus kelloggii*). Topography within the Project Site is characterized as gently sloping hills that transition to relatively steep, low mountains, with elevations ranging from approximately 3,700 feet (ft; 1,128 meters [m]) on the western extent of the Project Site to 5,400 ft (1,646 m) near Snow Mountain in the southeast.

RESPONSE TO DR BIO-002, BIO-005, AND BIO-027: SPOTTED OWL OCCURRENCE DATA IN THE PROJECT VICINITY

CSO (proposed for federal listing) and NSO (federally listed) have ranges that overlap in the vicinity of the Pit River in Shasta County, CA. To assist with conservation efforts for NSO and CSO, Gutierrez and Barrowclough (2005) clarified range limit discrepancies presented for these two subspecies by the American Ornithologists Union (AOU 1957 as cited) and the US Department of Interior at the time of its listing (USDI 1990). Gutierrez and Barrowclough (2005) cited the AOU as depicting the eastern extent of the NSO range as western Siskiyou County west of the Sacramento River, and the range of the CSO as Tehama County south to Tulare County in the Sierra Nevada. At the time of listing, the Department of Interior (USDI 1990), cited the range of NSO as southwestern British Columbia, through western Washington, western Oregon, and northern California south to San Francisco Bay, with the southeastern boundary of its range, separating it from the CSO, being the Pit River area of Shasta County. Gutierrez and Barrowclough (2005) used genetic data to clarify the ranges of these two species, defining the range of NSO as “From extreme southwestern British Columbia.... Southeast to the Pit River, in Shasta County” and that of the CSO as “West slope (locally on east slope) of Sierra Nevada in California from Shasta (Pit River) and Lassen Counties south to Kern County....”. Barrowclough et al. (2011), also through genetic analysis, illustrated a hybrid zone in the Pit River region, with data indicating that the centroid of the zone of overlap was south of the Pit River. Barrowclough et al (2011) discusses the challenges in defining a range boundary, for the purposes of regulatory management, between two subspecies one of which is federally listed.

USFWS Range Definition

The USFWS, the agency responsible for management of the federally listed NSO, currently presents the southern boundary of the NSO range as roughly following State Route (SR) 299, while they present the northernmost range of the CSO as partially overlapping that of the NSO

north of SR299, but south of the Pit River (Figure 1; USFWS 2023a, 2023b). This general area has been described as an area of low spotted owl density (Gutierrez and Barrowclough 2005, Barrowclough et al. 2011) where the two subspecies come into contact. In the CDFW spotted owl database, all historical records south of SR299 are labeled as CSO (with one exception which appears as a 2019 data point labeled as a possible occurrence; CDFW 2023a). Most spotted owl occurrences north of SR299 and south of the Pit River are labeled as NSO, with all NSO data points in this area predating the 2005 Gutierrez and Barrowclough publication. All occurrence records in this area post 2005 are labeled as CSO (Figure 1). Consistent with the USFWS range definition and CDFW occurrence data, NSO is not anticipated to occur within the Project Area.

Forest Practice Rules Range Definition

Forest management in the state of California is largely under the purview of the California Forest Practice Rules (FPR; CAL FIRE 2023), the purpose of which is to implement the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 in a manner consistent with other state laws, including the California Environmental Quality Act (CEQA), the California Endangered Species Act (CESA), the Porter Cologne Water Quality Act, and the Timberland Productivity Act of 1982. In the FPR (pages 16-17; CAL FIRE 2023), the area in which NSO needs be evaluated for impacts resulting from timber harvest operations (i.e., NSO Evaluation Area) is defined as:

“.....and those portions of Siskiyou and Shasta counties west of the line indicated by the following descriptions: south from the California-Oregon border along the east boundary of Township 48N, Range 2W, MDB&M; thence west along the south boundary of Township 48N, Range 2W, MDB&M; thence south along Secret Spring Road; thence south and east along Meiss Lake Sams Neck Road; thence southwest along U.S. Highway 97; thence, at the southern end of the town of Macdoel, south along Old State Highway to due east of Orr Mountain; thence east and south along Tennant Road to about one half mile south of the town of Tennant; thence east along Forest Highway 77 (44N01) to its junction with Forest Highway 15; thence east along 44N01; thence south along the line dividing Ranges 4E and 5E, MDB&M; thence west along the line dividing Townships 42N and 41N, MDB&M; thence south along the line dividing Ranges 2E and 3E, MDB&M; thence south along State Highway 89; **thence west along the Pit River to Shasta Lake;** thence west along the south shore of Shasta Lake to Interstate 5; thence south along Interstate 5 to the Shasta County line.”

This definition of the NSO Evaluation Area has been included in the FPR, the primary regulatory document governing timber harvest operations in California, since 2009 (CAL FIRE 2009) and clearly defines the need for NSO surveys as the area north of the Pit River. The FPR also defines habitat operational restrictions and habitat retention measures necessary to avoid “take” of NSO when conducting timber harvest operations. These measures evaluate impacts (disturbance and/or modification of habitat) at variable spatial buffers around NSO activity centers, with the largest buffer evaluated being 1.3 mi. Consistent with the FPR and CDFW occurrence data, NSO is not anticipated to occur within the Project Area.

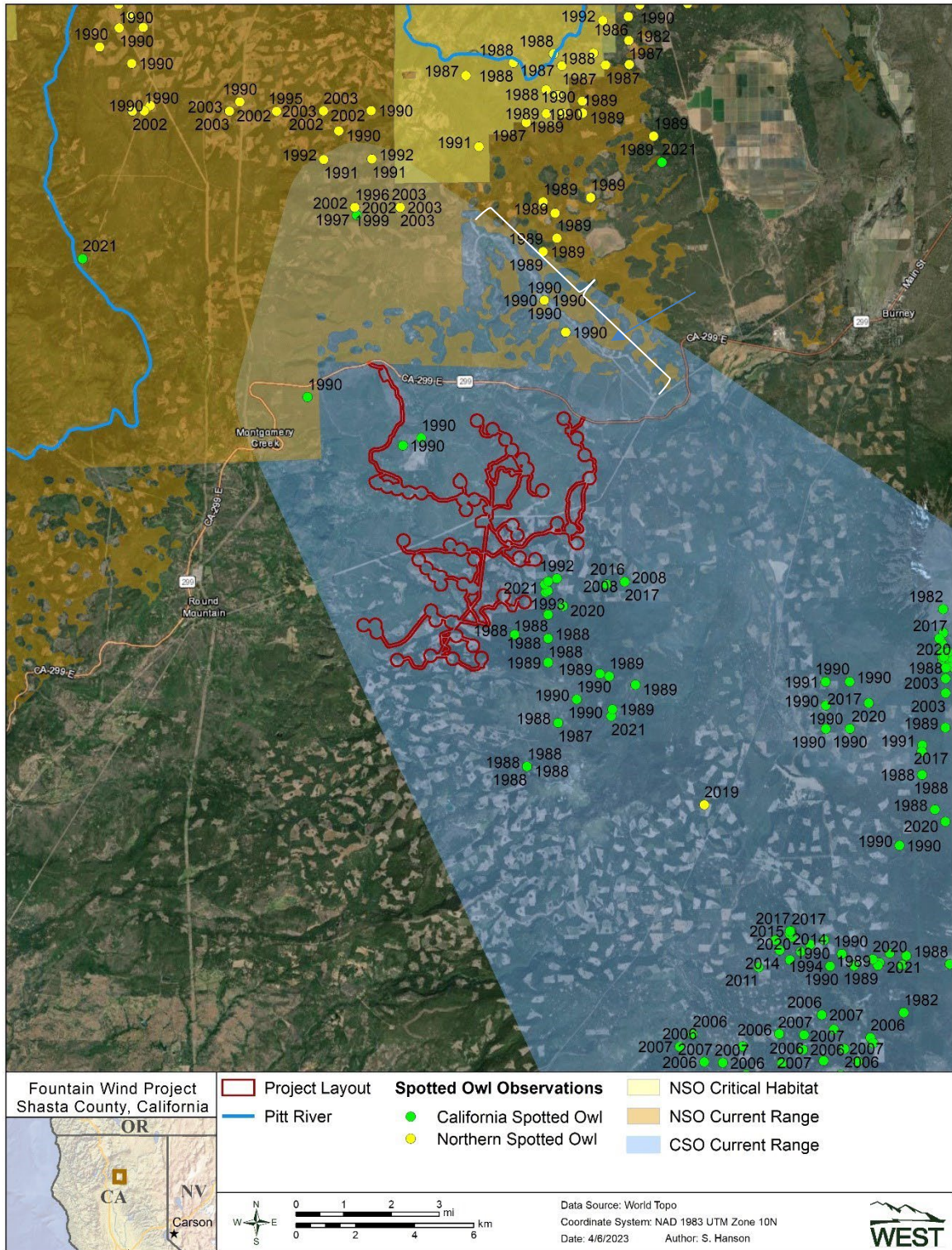


Figure 1. Range of the Northern (NSO) and California (CSO) spotted owl in the vicinity of the Fountain Wind Project, as downloaded from the USFWS (USFWS 2023a, 2023b), and historical CSO and NSO occurrences in the vicinity of the Fountain Wind Project in Shasta County, California, as obtained from the California Spotted Owl Database (CDFW 2023a). Year associated with each occurrence record is plotted.

Potential Project Impacts within the Ranges of NSO and CSO

Regardless of the NSO range boundary used (e.g., the Pit River as defined in the FPR or roughly the SR 299 corridor as depicted by USFWS range maps), Project construction will not result in the removal or modification of northern spotted owl nesting, roosting, or foraging habitat within 1.3 mi of either range boundary, and especially not within 1.3 mi of any recently occupied NSO activity center. Based on peer-reviewed literature (Gutierrez and Barrowclough 2005, Barrowclough et al. 2011), guidance from regulatory agencies (USFWS 2023, CAL FIRE 2023), and historical spotted owl occurrence data available from the CDFW Spotted Owl database, the Project is definitively outside the NSO range. As such, the Project will not impact NSO.

The Project is located within the range of CSO, recently proposed for listing by USFWS under the ESA. Data from the CDFW Spotted Owl database show three historical CSO activity centers represented by a number of historical CSO occurrences in the vicinity of the Project, as evidenced by the master owl numbers associated with the occurrence data (CDFW 2023a). Additional information on the three CSO activity centers shown in the historical records within 1.3 mi of the Project is provided below and in Figure 2.

Site SHA0063

One historical CSO activity center (SHA0063) was located in the northwestern portion of the Project (Figure 2). The last occurrence data associated with SHA0063 was from the 1990 survey season. All functional spotted owl habitat associated with this activity center was completely destroyed by the Fountain Fire in 1992, and the area now consists of dense stands of regenerating early seral forest, which is not considered to be functional spotted owl habitat (CAL FIRE 2023). Given that SHA0063 has been unoccupied since 1992, SHA0063 would no longer be treated as an activity center under the FPR's, which no longer consider a site unoccupied for three or more years as an activity center (CAL FIRE 2023). Regardless, no modification of spotted owl habitat will occur within 1.3 mi of this historical activity center.

Site SHA0046

Activity center (SHA0046) is located within 1.3 mi of the eastern side of the Project (Figure 2). According to CDFW occurrence data, this activity center dates back to at least 1988, with the most recent occurrence data being the nest site located in 2021 during surveys conducted for the Fountain Wind Project. The activity center, based on the 2021 nest location, is approximately 0.4 mi (2,000 ft) from the closest Project disturbance. Impacts to habitat resulting from the Project within the home range of SHA0046 will be minimal and indirect.

The Project has the potential to remove up to 4.9 acres of CSO habitat within 0.7 mi, and up to 25 acres within 1.3 mi, of activity center SHA0046. These habitat modifications would primarily be associated with widening of existing road corridors within the already highly fragmented commercial timberlands, whereas no impacts would occur in the intact and contiguous core area associated with the activity center, which is located on Lassen National Forest lands just east of the Project. These edge habitats along existing roads would be used primarily for foraging, not for nesting or roosting. No vegetation removal would occur within interior forest habitats typically

associated with nesting and roosting. Ultimately, the removal of up to 25 acres of edge habitat at distances of more than 0.4 mi from the activity center will have minimal impact on the availability of CSO habitat in this region, and a negligible impact on the population-level survival of this species, the threshold described in the CEQA Guidelines. These minor habitat modifications, well away from the activity center, assuredly would not result in the loss of the activity center as defined in the FPR (CAL FIRE 2023), nor would it constitute a significant adverse impact on the species as a whole for CEQA purposes.

Site SHA0124

Based on the most prevalent occurrence data in the CDFW database, Site SHA0124 is located approximately 1.3 mi east of the Project, with the closest data point (an owl heard) being approximately 1.0 mi from the Project. No modification of spotted owl habitat will occur within 1.3 mi of this activity center, therefore no impacts to the site are anticipated as a result of the Project.

Impact-Reduction Commitments

Shasta County's Environmental Impact Report (EIR) for this project concluded that impacts to California spotted owl nesting and roosting habitat were less than significant because of the lack of recent occurrences in or near the Project and because the amount of potential habitat to be cleared for the project is only a small portion of available habitat in the region, and is consistent with current land uses (timber harvest; DEIR at 3.4-46; TN# 248288-6).

Nevertheless, the Project would implement the California Spotted Owl Conservation Measures outlined in the Shasta County Environmental Impact Report (DEIR at 3.4-47; TN# 248288-6) during construction, which require at least one season of preconstruction surveys for CSO in moderate or high quality habitat areas or an assumption of occupancy; and limitations on construction noise, smoke-generating activities, or habitat modification within 0.25 mile of an active CSO nest site during the nesting season.

This measure is consistent with, and exceeds the thresholds outlined in the FPR (CAL Fire 2023; page 119) for federally listed NSO. Currently, there is approximately 683 acres of habitat within 0.7 mi and 1,818 acres of habitat within 1.3 mi of the activity centers. The Project would not alter habitat conditions within 500 ft of any of the three CSO activity centers described above, nor would any Project-related activities occur within 500 ft of an activity center. The Project would not reduce spotted owl habitat below 500 acres within a 0.7 mi radius buffer of an activity center; and would not reduce spotted owl habitat below 1,336 acres within a larger 1.3 mi radius of an activity center.

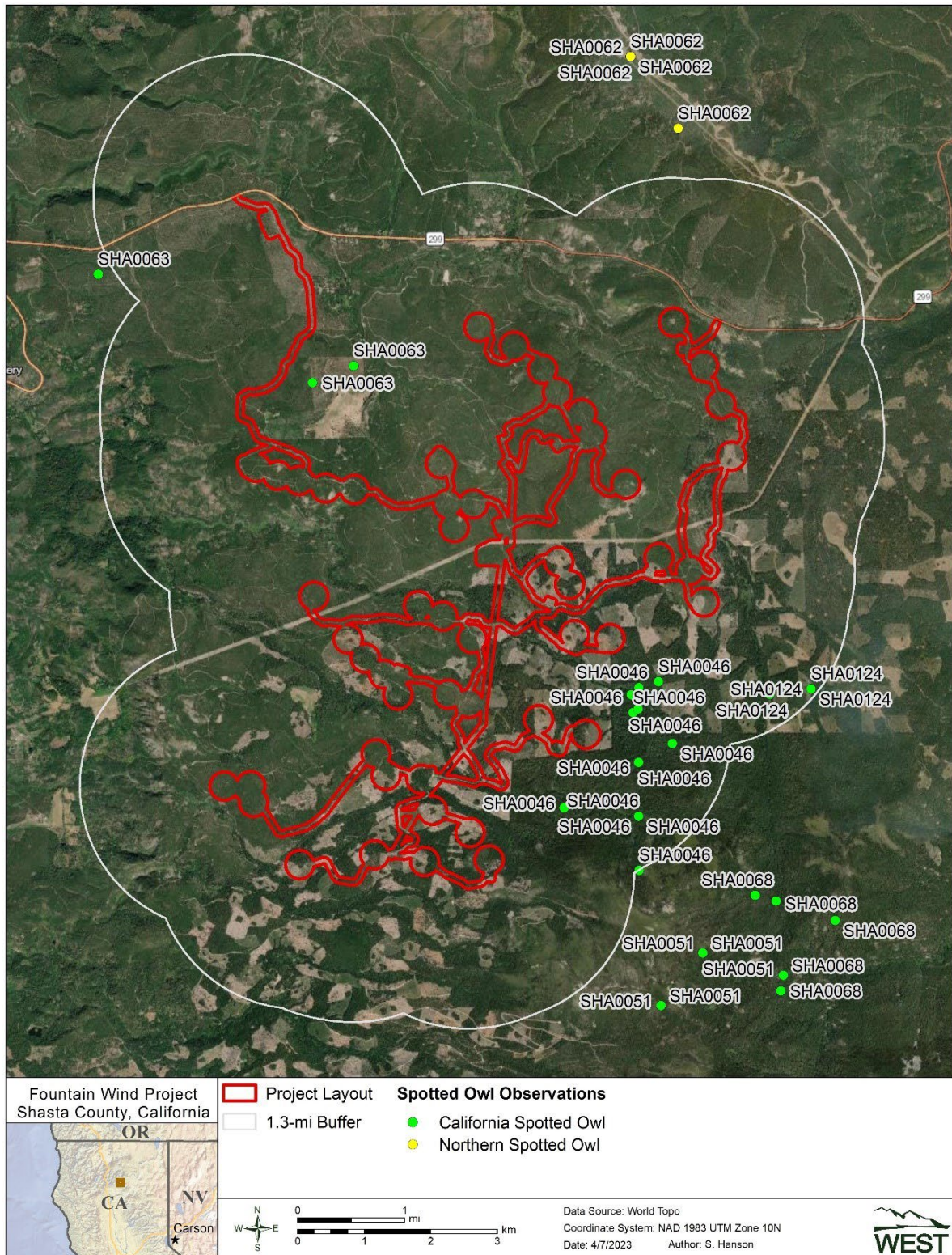


Figure 2. Northern and California spotted owl occurrences within approximately 1.3 mi of the Fountain Wind Project in Shasta County, California, as obtained from the California Spotted Owl Database (CDFW 2023a). SHA numbers indicate historical activity center designations (i.e., owl territories) associated with each occurrence record.

RESPONSE TO DR BIO-030: NEED FOR ADDITIONAL SPOTTED OWL SURVEYS

Project construction will not result in the removal or modification of spotted owl nesting, roosting, or foraging habitat within 1.3 mi of either the USFWS (2023) or FPR (CAL FIRE 2023) NSO range boundary. Therefore, surveys for NSO are not warranted. However, given that surveys for both species use the same survey protocol, any preconstruction surveys conducted for CSO could be considered suitable for detection of both, though any spotted owl detected within the Project area would be treated as CSO under current regulatory guidance (CAL FIRE 2023).

CSO is currently considered a species of special concern by CDFW (CDFW 2023b), but has been proposed for listing as federally threatened in this portion of its range (USFWS 2023c). The Shasta County EIR included a mitigation measure requiring pre-construction survey for nesting raptors within 500 ft of project disturbance areas, which would serve to minimize impacts to CSO. This measure would also ensure that timber harvest would be avoided within 500 ft of an activity center during the nesting season, consistent with the FPR (CAL FIRE 2023). Consistent with previous pre-construction survey commitments, Fountain Wind may perform additional surveys to confirm the findings of previous surveys. However, because an adequate baseline of surveys has already been conducted for CEQA purposes (i.e., to determine whether the Project is likely to have a significant adverse impact on the species as a whole), it is our recommendation that the CEC can prepare an EIR based on the existing information in the record and does not need to wait for additional protocol-level surveys. As the CEC is undoubtedly well aware, the purpose of CEQA is not to determine whether a project will result in “take” of a species, but instead to determine whether a Project is likely to have a significant adverse impact on a species’ population. There is already substantial evidence in the record to support the conclusion that the Project would not have a significant adverse impact on the species as a whole.

SUMMARY AND CONCLUSIONS

The CEC, in response to Fountain Wind’s Opt-in Application for Certification, requested additional information pertaining to CSO and NSO. The four requests are provided below, with summary conclusions and responses to each provided, based on the information provided in this memo.

BIO-002: Required Information: Please provide any reports or background data regarding the potential for these species to occur and identify any protective measures that would be proposed. Please provide maps that show Critical Habitat for this species.

Response: Additional background information regarding the range and regulatory treatment of each subspecies is provided herein and provides clarity on the potential for these species to occur in and/or be impacted by the Project. Fountain Wind is committed to conducting additional surveys for CSO prior to project construction, but additional surveys are not needed before an adequate EIR can be prepared. Critical habitat for NSO is depicted in Figure 1 of this memo, and GIS data is being provided to CEC as part of this response package.

BIO-005: Required Information: Please provide updated information on occurrences of spotted owl within and near the Project site

Response: All up to date (as of March 2023) spotted owl occurrence data in the vicinity of the Project is mapped in Figure 1 of this report. Data from all spotted owl observations within 10 mi of the project have been provided to CEC in a GIS data package as part of this response.

BIO-026: Required Information: The current data available does not support the conclusion that the site does not provide habitat for federal listed northern spotted owl. Please provide an updated habitat assessment for the northern spotted owl including appropriate information that supports the conclusion that evaluation for federal listed NSO is not appropriate. The results of the memo should indicate whether NSO surveys are warranted, whether the project intends to assume presence, and if presence is assumed or NSO are detected, the process for consultation under the federal endangered species act (FESA).

Response: This memo provides additional information specific to NSO and confirms the conclusion of the Shasta County EIR that the site does not provide habitat for the federally listed NSO. Given the Project is outside of the NSO range, surveys for NSO are not warranted and consultation with USFWS is unnecessary.

BIO-030: Required Information: Please conduct an additional round of surveys for spotted owl in accordance with the USFWS protocol. Please indicate whether the spotted owls observed were identified as CSO in the field or assumed to be CSO based on the Spotted Owl Risk Assessment.

Response: Fountain Wind is committed to conducting additional spotted owl surveys prior to construction to obtain additional data on CSO ahead of its potential listing. However, additional surveys are not necessary to inform preparation of the Project's environmental document. As discussed in this memo, all surveys conducted in the Project area would be viewed as CSO surveys and any spotted owl detected would be assumed a CSO based the published range maps and genetic data presented herein.

LITERATURE CITED

Barrowclough, G.F., R.J. Gutierrez, J.G. Groth, J.E. Lai, and D.F. Rock. 2011. The Hybrid Zone Between Northern and California Spotted Owls in the Cascade-Sierran Suture Zone. *The Condor* 113(3):581-589.

California Department of Forestry and Fire Protection (CAL FIRE). 2009. California Forest Practice Rules 2009. Title 14, California Code of Regulations Chapters 4, 4.5, and 10. Available at: <https://bof.fire.ca.gov/regulations/bills-statutes-rules-and-annual-california-forest-practice-rules/>

California Department of Forestry and Fire Protection (CAL FIRE). 2023. California Forest Practice Rules 2023. Title 14, California Code of Regulations Chapters 4, 4.5, and 10. Available at: <https://bof.fire.ca.gov/regulations/bills-statutes-rules-and-annual-california-forest-practice-rules/>

California Department of Fish and Wildlife (CDFW). 2023a. California Natural Diversity Database (CNDDDB) Spotted Owl Observations Database. Accessed March 2023. Available at: <https://wildlife.ca.gov/Data/CNDDDB/Spotted-Owl-Info>

California Department of Fish and Wildlife (CDFW). 2023b. Special Animals List. California Natural Diversity Database. August 2023. Available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline>

- California Endangered Species Act (CESA). 1984. California Fish and Game Code Sections (§§) 2050-2115.5. (Added by Statutes 1984, chapter 1240, § 2.).
- Gutiérrez, R.J. and G.F. Barrowclough. 2005. Redefining the distributional boundaries of the northern and California spotted owls: implications for conservation. *The Condor* 107: 182–187.
- US Fish and Wildlife Service (USFWS). 2023a. Northern Spotted Owl (*Strix occidentalis occidentalis*). USFSW Environmental Conservation Online System. Range Information, last updated May 20, 2021. Accessed March 2023. Available online: <https://ecos.fws.gov/ecp/species/1123>
- US Fish and Wildlife Service (USFWS). 2023b. California Spotted Owl (*Strix occidentalis occidentalis*). USFSW Environmental Conservation Online System. Range Information, last updated March 15, 2023. Accessed March 2021. Available online: <https://ecos.fws.gov/ecp/species/7266>
- US Fish and Wildlife Services (USFWS). 2023c. Proposed Rule, Endangered and Threatened Wildlife and Plants: California Spotted Owl; Endangered Status for the Coastal-Southern California Distinct Population Segment and Threatened Status with Section 4(d) Rule for the Sierra Nevada Distinct Population Segment. Available at: <https://www.regulations.gov/document/FWS-R8-ES-2022-0166-0001>