

Appendix F Responses to Comments

Responses to Comments: Agencies

No comments were received from federal agencies. Comments were received from the following State Agency:

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State of California
Department of Fish and Wildlife



M e m o r a n d u m

Date: February 17, 2023

To: Arnica MacCarthy
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Governor's Office of Planning & Research

Feb 21 2023

STATE CLEARINGHOUSE

DocuSigned by:

Erin Chappell

From: Ms. Erin Chappell, Regional Manager
California Department of Fish and Wildlife-Bay Delta Region, 2825 Cordelia Road, Suite 100, Fairfield, CA 94534

Subject: State Route 1 Centerline Rumble Strips Project (04-4G780), Initial Study/Negative Declaration, SCH No. 2023010380, Sonoma County

The California Department of Fish and Wildlife (CDFW) has received the Notice of Availability for the draft Initial Study/Negative Declaration (IS/ND) for the State Route (SR) 1 Centerline Rumble Strips Project (Project), pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹ CDFW is submitting comments on the draft IS/ND as a means to inform the California Department of Transportation (Caltrans) as the Lead Agency, of our concerns regarding potentially significant impacts to biological resources associated with the proposed Project.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's Lake and Streambed

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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Alteration (LSA) regulatory authority. (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in “take” as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT LOCATION AND DESCRIPTION

Caltrans proposes to install centerline rumble strips, wet-night visibility striping and widen shoulders at 50 locations along State Route (SR) 1 in Sonoma County. The installations will occur over a 58.58-mile stretch from the Marin County line to the Mendocino County line.

Centerline Rumble Strips

Caltrans proposes to install incongruous sections of ground-in centerline rumble strips on SR-1 at 50 locations as specified in Table 1-1 on page 1-2 to page 1-4 of the IS/ND. The centerline rumble strips will be discontinued where the speed limit is equal to or less than 35 miles per hour (mph). The locations include a minimum of 25 feet in advance of highway intersections, pedestrian crossings, cattle guards, commercial or town centers, and left-turn lane openings. For the installation of the ground-in centerline rumble strips a grinder truck would grind the existing striping from the centerline, and grind in the centerline rumble strip. The highway surface will be cleaned immediately after with a vacuum truck and application of new 6-inch-wide wet-night visibility striping will be completed with a striping truck, within the same closure limits.

Shoulder Widening

The shoulder widening will increase the existing shoulder to 6 feet at 50 locations (Table 2-3) on page 2-4 to page 2-5 of the IS/ND. In areas with an existing width of shoulder that is relatively flat or on an uphill grade, extensive embankment creation, excavation, or retaining structures will not be required to construct the shoulder widening. In locations where the existing width of the shoulder is not adequate, the depth of excavation at the shoulder widening locations will be 1.8 feet. The total new impervious surface (NIS) due to the shoulder widening will impact 4.05 acres. The Project will provide sufficient shoulder width to accommodate bicyclists where off-road bicycle facilities are not feasible. The widening and paving of the 6-foot shoulders from the existing edge of travel way (ETW) will be completed separately from the rumble strip and restriping operation. Shoulder closures are anticipated during construction of the shoulder widening. A temporary barrier system will be placed along the ETW. Locations of the shoulder widening will require clearing and grubbing of vegetation.

Drainage Systems

Drainage improvements will include new impervious areas created by the shoulder widening that will increase roadway runoff. The existing drainage facilities, such as

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cross culverts and roadside ditches, have the capacity to handle this increase. Drainage locations within the widened shoulder will cause the embankment slope to encroach into the existing roadside ditch, reducing its capacity. To minimize this impact, design strategies such as reducing the proposed 3-foot choker and/or steepening the side slope to a 2:1 ratio will be employed. The choker is the area between the outside edge of the shoulder and the top of the embankment slope, and its purpose is to drain runoff away from the highway, towards the embankment. Any existing ditches or swales impacted by the Project will need to be reestablished. The Lead Agency has not determined if excavation required for the Project would impact any culverts. Concrete backfill will be required along the portion of a culvert with less than 2 feet of material above the top of the culvert. For any drainage inlets that will be impacted, the frames and grates or the inlet tops will be adjusted to grade.

REGULATORY REQUIREMENTS

Lake and Streambed Alteration Agreement Notification

CDFW requires an LSA Notification, pursuant to Fish and Game Code § 1600 et. seq., for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank (including associated riparian or wetland resources); or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are generally subject to notification requirements.

Fully Protected Species

Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take, except for collecting these species for necessary scientific research and relocation of a fully protected bird species for the protection of livestock. Take of any fully protected species is prohibited, and CDFW cannot authorize their take in association with a general project except under the provisions of a Natural Communities Conservation Plan (NCCP), 2081.7 or a Memorandum of Understanding for scientific research, including efforts to recover fully protected, threatened, or endangered species. "Scientific Research" does not include an action taken as part of specified mitigation for a project, as defined in Section 21065 of the Pub. Resources Code.

California Endangered Species Act

Please be advised that a CESA Permit must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the Project. Issuance of a CESA Permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA Permit. CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact

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threatened or endangered species (Pub. Resources Code, §§ 21001(c), 21083, and CEQA Guidelines §§ 15380, 15064, 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code, § 2080. More information on the CESA permitting process can be found on the CDFW website at <https://www.wildlife.ca.gov/Conservation/CESA>.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the Lead Agency in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on biological resources.

COMMENT 1: Lake and Streambed Alteration Program Notification

Issue: The IS/ND does not provide adequate detail of the permanent and temporary impacts that have the potential to occur within the bed, bank, channel, and riparian habitat associated with the Project. This could have the potential for a substantial adverse effect on riparian habitat.

Recommendation: CDFW recommends the Lead Agency include a determination on the permanent and temporary impacts to bed, bank, channel, and upland riparian habitat necessary to widen the roadway and modify culverts. The updated IS/ND should also specify which segments of the roadway will require roadside slope increases and additional hardscape installations.

Recommendation 1 – Seasonal Work Window: Measure PF-BIO-1 in the IS/ND should be updated to incorporate specific seasonal work windows within aquatic features that may impact bed, bank, channel, or riparian habitat. The recommended work window is June 15 to October 15. The measure should also be updated to include language that indicates no work shall occur within 24 hours of a rain event predicated at a chance of 40% or more according to the National Weather Service.

Recommendation 2 – Culvert Impact Inventory Report: A culvert impact inventory should be developed that places additional columns in Table 1-1 and/or Table 2-3 of the IS/ND. The additional columns should include a column for temporary impacts, permanent impacts, and a column for fish passage status in the Fish Passage Database (Fish-PAD; Biological Information and Observation System (BIOS); DS-69). A column should also be included for terrestrial crossing potentials at each culvert location within the Project limits. A final column should be included that identifies if excavation and/or increase of the slope is necessary to install Project related components identified in the Project Description of this comment letter.

Recommendation 3 – Geo-Textiles, Filter-Fabric and Cementitious Material: CDFW recommends the design or re-design of any culverts within the Project does not

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employ geo-textiles, filter-fabric, or cementitious material within rock slope protection fields of drainage outfalls. A granular filter design should be incorporated in coordination with CDFW Conservation Engineering Staff. The design should follow the principles outlined in the *Federal Highway Administrations' Hydraulic Engineering Circular No. 23 (HEC-23) - Bridge Scour and Stream Instability Countermeasures-Third Edition Volume 2* (Lagasse et al, 2009) and *Caltrans' Design Information Bulletin No. 87-01 – Hybrid Streambank Revetments* (Caltrans, 2014) for design guidance on granular filter designs. In the event work is occurring within a salmonid bearing system, fish spawning gravel should be incorporated into the channel design where appropriate. Size selection should be conducted in close coordination with CDFW. Gravel should consist of clean, creek-run rock, 0.25 to 10.2 centimeters in size.

Recommendation 4 - Restoration and Mitigation Planning: CDFW strongly recommends the Lead Agency develop a mitigation plan in coordination with CDFW for any permanent Project impacts that cannot be avoided that will be subject to LSA permitting and include that plan as part of the updated IS/ND. The mitigation concept provided in BIO-AMM-19 for restoration, enhancements or mitigation at a 1:1 ratio for permanent impacts does not appear to appropriately reduce potentially significant impacts to fish and wildlife resources below a level of significance. The mitigation plan should include in detail any proposed on and/or off-site mitigation needs necessary to compensate for net-loss of river or stream resources including, but not limited to, tree trimming, tree removals, hardscape materials and geo-textile fabric within the bed, bank or channel of a stream, loss of riparian vegetation and mature trees, and expansion of existing infrastructure footprint(s). CDFW recommends proposed mitigation plan(s) include details such as engineered design drawings, mitigation location(s), proposed actions, monitoring, success criteria and any corrective actions.

Recommendation 5 – Culverts in High Fire Severity Zones: Figure 3-1 of the IS/ND includes 15 High Fire Severity Zones maps that indicate the Project occurs within Moderate, High and Very High Fire Severity Zones. CDFW recommends the reliance on non-plastic-based materials in instances where culverts are modified, replaced, or reconstructed to prevent the potential for fire events to melt the material and increase micro-plastic pollution within the environment. CDFW recommends the use of corrugated metal pipe or steel pipes for permanent culvert replacement or modification applications and when employing temporary stream diversions systems in High to Very High Fire Severity Zones.

Recommendation 6 – Design Coordination with HabCon and Conservation Engineering: Early coordination with the CDFW Habitat Conservation Program (HabCon) and the Conservation Engineering Branch is recommended to provide review and analysis of any proposed staging, access roads, structures or Project elements with the potential to impact fish and wildlife resources. Provide the CDFW Conservation Engineering Branch engineered drawings, a basis of design report and Project specifications during the initial design process, prior to design selection and re-initiating

SA-1-1
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SA-1-1
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design consultation at 30% design at minimum, and through the permitting process for review and comment.

COMMENT 2: Bridge Runoff Capture Systems

Issue: The IS/ND indicates 4.05 acres of impervious surface will be impacted and the roadway widening will increase the surface area of impervious surfaces throughout the Project. The Project Description also indicates that numerous culverts and drainage systems have the potential to be modified. Impervious surfaces, stormwater systems, and storm drain outfalls have the potential to significantly affect fish and wildlife resources from polluted water by altering the hydrography of natural streamflow patterns via concentrated run-off that enters streams and associated systems from the road. The IS/ND PF-BIO-5 indicates bio-filtration strips and swales will be employed to the maximum extent practicable. The Project Description wording is vague because it does not indicate if the installation of any new bio-filtration strips or swales will actually occur or where they may be placed. This could have the potential for a substantial adverse effect on sensitive species.

SA-1-2

Evidence the impact would be significant: Urbanization (e.g., impervious surfaces, stormwater systems, storm drain outfalls) can modify natural streamflow patterns by increasing the magnitude and frequency of high flow events and storm flows (Hollis 1975, Konrad and Booth, 2005). A review by Eisler (1987) indicates elevated incidence of tumors and hyperplastic diseases, and some circumstantial evidence about cancers, in fish in areas with high sediment Polycyclic Aromatic Hydrocarbon (PAH) levels. Arsenic, cadmium, chromium, lead, mercury, nickel, and zinc have been detected in streambed sediments and Stormwater Runoff in the tissue of fish, indicating bioaccumulation of these metals in the environment (MacCoy and Black, 1998). Lead concentrations in benthic insects, and nickel and cadmium levels in certain fish were found to be related to traffic density and sediment levels of these constituents (Van Hassel, 1980). Acute toxicity and mortality have also been tied to immediate road runoff from a compound occurring in tires, 6PPD-Quinnone, that has been linked to Coho mortality (Tian, 2021).

Recommendation 1: Bridge Capture Runoff System: CDFW recommends the Project design incorporate specific bio-filtration strips, swales and other storm water capture run-off systems throughout the Project. The storm water capture runoff systems shall prevent direct runoff of untreated water from the roadway into creeks, drainages or swales. The stormwater runoff system shall direct runoff to a land-based bio-filtration system or a mechanical filter system to avoid, minimize and treat any discharge water. Reference the *Bridges Stormwater Runoff from Bridges Final Report to Joint Legislation Transportation Oversight Committee*, beginning on page 2-12 of the report for examples of an appropriate runoff capture system design.

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COMMENT 3: Tree Removal Analysis

Issue: Page 3-6, Section 3.3.1 of the IS/ND indicates that trees will be trimmed or removed throughout the Project. The IS/ND does not provide a map, figure, or specific inventory of trees proposed for trimming or removal which would allow CDFW to assess the impact of the activity to fish and wildlife resources as it pertains to trees. This could have the potential for a substantial adverse effect on riparian habitat and sensitive species.

SA-1-3

Recommendation 1 - Tree Inventory Report: Provide a tree inventory that includes a map or figure that identifies the location, species, diameter at breast height, estimated age, and overall health of all trees proposed for removal and trimming.

Recommendation 2 - On-Site Preservation of Forest Trees and Riparian Trees: Impact to trees should be avoided to the maximum extent feasible and additional designs should be incorporated to minimize impacts on mature native trees and riparian resources.

Recommendation 3 - Restoration and Mitigation Planning: Reference **Recommendation 4 - Restoration and Mitigation Planning** from the **COMMENT 1: Lake and Streambed Alteration Program Notification** section of this comment letter.

COMMENT 4: Northern Spotted Owl Avoidance and Minimization

Issue: Northern Spotted Owl (NSO) is federally listed as threatened under the Endangered Species Act (ESA) and is CESA listed as threatened. The potential impacts identified within the IS/ND to suitable NSO habitat may not adequately describe all the potential permanent and temporary impacts to NSO habitat. If the proposed measures are not updated as identified in the section below for NSO, the Project could have the potential for a substantial adverse effect on sensitive species.

SA-1-4

Evidence the Impact is Significant: The Project occurs within potential NSO habitat according to Spotted Owl Predicted Habitat (BIOS; DS-2185) and within NSO Habitat for Connectivity Modeling (BIOS; DS-876). In addition, 200 detections occur within 5 miles of the Project, 6 of those detections occur within 0.33 to 1.07 miles as noted on page 3-17 and 3-18 of the IS/ND. The Project also proposes the removal of an unspecified number of trees and indicates impact to 0.178 acres (temporary and permanent combined) of NSO habitat. CDFW recommends additional habitat analysis is conducted as the impact footprint may be larger than initially described. NSO is typically associated with old-growth or mature forests, but NSO can utilize a wide variety of habitat types, including oak woodlands. They exhibit flexibility in their use of different forested areas for nesting, roosting, and feeding requirements. Typical habitat characteristics include a multi-storied structure and high canopy cover (Thome, 1999). Impacts from the Project would be significant if NSO nests or nesting trees were cut down or if nearby nesting NSO were exposed to elevated sound levels or human presence that would cause nest abandonment.

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SA-1-4
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Recommendation 1 – Nest Avoidance Buffer and Seasonal Work Window: AMM BIO-6 and AMM BIO-7 should be updated as follows: To reduce impacts to less-than-significant, no Project activities shall occur within 0.25 miles of NSO nesting habitat from March 15 to August 31, unless NSO surveys have been completed by a qualified biologist following the U.S. Fish and Wildlife Service (USFWS) *Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls*, dated (revised) January 9, 2012 and the survey report is accepted by CDFW in writing. If breeding NSO are detected during surveys, a 0.25-mile no-disturbance buffer zone shall be implemented around the nest. NSO surveys shall be conducted for each year Project construction occurs. No Project activities shall occur within the buffer zone until the end of the breeding season, or a qualified biologist determines that the nest is no longer active, unless otherwise approved in writing by CDFW. Alternate buffer zones may be proposed by a qualified biologist after conducting an auditory and visual disturbance analysis following the USFWS guidance, *Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California*, dated October 1, 2020. Alternate buffers must be approved in writing by CDFW. Survey results shall be provided to the Spotted Owl Observations Database at <https://wildlife.ca.gov/Data/CNDDDB/Spotted-Owl-Info>. If NSO are detected, CDFW and the USFWS shall be immediately notified.

Recommendation 2 – California Endangered Species Act Consultation for Northern Spotted Owl: If Project activities may result in take of NSO, the Project proponent shall apply for and obtain a CESA Incidental Take Permit from CDFW prior to beginning the Project.

COMMENT 5: Terrestrial Wildlife Connectivity

SA-1-5

Issue: The Project has the potential to significantly impact terrestrial wildlife connectivity over a 58.58-mile linear segment of highway on SR-1 in Sonoma County. The surrounding habitat supports threatened, endangered, special-status and native species including, but not limited to, California Giant Salamander (CGS), Foothill Yellow-Legged Frog (FYLF), California Red-Legged Frog (CRLF) and Red-Bellied Newt (RBN). Page 2-5 to 2-6 of the IS/ND notes drainage system extensions, modifications and roadway widening may require an increase in the slope of the road invert to 2:1. The increase of the slope at the edge of the roadway or modification of multiple culverts may have the potential to create a series of impassable barriers over a 58.58-mile segment of SR-1 that could substantially interfere with the movement of small herpetofauna.

Evidence the impact would be significant: California wildlife is losing the ability to move and migrate as habitat conversion and built infrastructure disrupt species habitat and cuts off migration corridors (Senate Bill 790; SB-790; https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB790). The current baseline condition of the area proposed for construction represents a semi-permeable barrier to wildlife connectivity. Larger wildlife species may cross at their own risk of injury or mortality but smaller species such as herpetofauna would most likely not

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cross the highway successfully without incurring injury or mortality. Further modification of the culverts and an increase in the slope at the edge of the roadway along the 58.58-mile segment of SR-1 has the potential to create a non-permeable barrier to terrestrial wildlife connectivity for herpetofauna, even if the construction occurs in focused segments.

Page 3-16 of the IS/ND indicates the Project occurs within the current range of CRLF and 20 California Natural Diversity Database (CNDDDB) occurrences reside within 2 miles of the Project. Numerous aquatic resources (e.g., drainages, streams, creeks, and ponds) are also located within 2 miles of the Project. Page 3-17 of the IS/ND indicates FYLF occurs in several creeks in the vicinity of the Project, and suitable non-breeding FYLF habitat is present throughout the Project. There are 11 CNDDDB occurrences of FYLF within 2 miles of the Project, most of which are located toward the northern end of the Project limits. Page 3-22 indicates 14 CNDDDB occurrences of CGS within 2 miles of the Project. Additionally, surveyors discovered two juvenile CGS within a creek in the Caltrans right-of-way adjacent to Location 49. Page 3-22 of the IS/ND indicates three CNDDDB occurrences of RBN within 2 miles of the Project. Wetlands, waters, and riparian and forested areas within the Project vicinity could provide suitable habitat for these species. The Project should incorporate a wildlife connectivity analysis and highway system facility modification designs to ensure connectivity remains and the potential for mortality is reduced for herpetofauna.

SA-1-5
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Recommendation Mitigation Measure 1 – Wildlife Connectivity: Terrestrial connectivity elements such as wildlife friendly culverts, under-crossings, elevated causeways and over-crossings should be programmed into the Project as design features. To inform design and placement of connectivity features, the Lead Agency shall develop a wildlife movement study. The study should occur over a minimum period of 12 months prior to the initiation of construction and preferably be incorporated into the draft IS/ND. The study shall occur within the limits of the proposed Project to develop a baseline understanding of the areas where wildlife movement and crossings are most prevalent. The study should also be utilized to inform Project design to identify areas where wildlife crossing structure(s) installation(s) would result in the largest benefit to rare, threatened, and endangered species, as well as, special-status species and non-special status species for wildlife connectivity. Analysis during the 12-month study shall be utilized to determine the type, size and number of structures that would be most beneficial to facilitate wildlife connectivity (new wildlife crossing culverts, modification of existing culverts, wildlife crossing bridges, etc.). Upon completion of the Project, the wildlife connectivity structures should be studied for an additional 12-month period, at minimum, to determine the effectiveness of structure utilization by wildlife. The protocol for the baseline survey, post-construction surveys, site selection criteria and design criteria for the development of the wildlife connectivity structures should follow the protocols outlined in; *The California Department of Transportation (Caltrans), Wildlife Crossings Design Manual* (Caltrans, 2009) and the *Federal Highway Administration Wildlife Crossing Structure Handbook – Design and Evaluation in North America, Publication No. FHWA-CFL/TD-11-003* (FHWA, 2011).

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Recommendation Mitigation Measure 2 – Wildlife Connectivity: The Lead Agency should develop a series of heat maps for target species along the SR-1 corridor using high value resource layers including, but not limited to, species presence/absence, drainages, culverts, creeks, road-strike data, and wildlife linkage corridors for pinpointing key wildlife crossing locations with high permeability and potential for use by target species.

Recommendation Mitigation Measure 3 – Drainage Escape Structures: The Lead Agency should design and implement, in coordination with the natural resource agencies, escape structures for small herpetofauna when drainage systems and culverts are not conducive for crossing and entrapment within the system is likely. Escape structure can include, but not be limited to, escape ramps, floating refuge buckets and amphibian ladders (McInroy, 2015 and Schelbert, 2009).

COMMENT 6: Fish Passage Assessment

Issue: Multiple potential fish passage barriers and unassessed locations exist within the identified Project limits. Senate Bill 857 (SB-857), which amended Fish and Game Code § 5901 and added § 156 to the Streets and Highways Code states in § 156.3, “For any project using state or federal transportation funds programmed after January 1, 2006, [Caltrans] shall ensure that, if the project affects a stream crossing on a stream where anadromous fish are, or historically were found, an assessment of potential barriers to fish passage is done prior to commencing project design. [Caltrans] shall submit the assessment to the [CDFW] and add it to the CALFISH database. If any structural barrier to passage exists, remediation of the problem shall be designed into the project by the implementing agency. New projects shall be constructed so that they do not present a barrier to fish passage. When barriers to fish passage are being addressed, plans and projects shall be developed in consultation with the [CDFW].” The modification of unidentified culverts over 58.58 miles on SR-1 could substantially interfere with the movement of native resident or migratory fish.

SA-1-6

Evidence the impact would be significant: The Project contains stream crossings within areas mapped as historic or current watersheds where anadromous fish are, or historically were found. The species include, but are not limited to, Central California Coast Coho – Critical Habitat and Range (BIOS; DS-3015 and DS-1277), California Coast Fall Chinook Salmon Range (BIOS; DS-1297) and Central California Coast Steelhead and Coastal Steelhead Trout Waters (BIOS; DS-1287 and DS-962). The decline of naturally spawning salmon and steelhead trout is primarily a result of the loss of appropriate stream habitat and the inability of fish to get access to habitat, according to reports to the Fish and Game Commission and by CDFW (CDFW, 1996). Restoration of access to historical spawning and rearing areas should be incorporated into the Project design through barrier modification, fishway installation, or other means (CDFW, 1996).

Recommendations: If barriers or unassessed barriers noted within the Project limits are found to be a barrier to fish passage, remediation of the problem should be

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designed into the Project by the implementing agency as a Project feature in consultation with CDFW and other natural resource agencies. The fish passage section should discuss the current status of each crossing location noted within the Fish Passage Assessment Database (BIOS; DS-69) from Table 1-1 and Table 2-3 of the IS/ND. First pass and/or second pass fish assessments, as necessary, and images of the upstream and downstream ends of water conveyance structure should be included in the updated IS/ND. Presenting the information in table format with corresponding maps is also strongly recommended.

Recommended Mitigation Measure 1: Fish Passage Assessment: To evaluate potential impacts to native fish species and fisheries resources, Caltrans should submit the assessment to the CDFW and add it to the CALFISH database. If any structural barrier to passage exists, remediation of the problem shall be designed into the Project by the implementing agency. New projects shall be constructed so that they do not present a barrier to fish passage. When barriers to fish passage are being addressed, plans and projects shall be developed in consultation with CDFW. CDFW shall be engaged prior to design in early coordination and at 30% design at minimum.

Recommended Mitigation Measure 2: Fish Passage Assessment Table: The Lead Agency shall develop a table for incorporation into the IS/ND that notes all proposed locations of work identified in Table 1-1 and 2-3 of the IS/ND and provide a corresponding column that indicates known culverts within the location of the proposed work. The table should identify the Fish PAD ID number, barrier status and the results of any primary or secondary fish passage assessments. CDFW will need this assessment and information in order to process an LSA Agreement Notification for the proposed Project.

Recommended Mitigation Measure 3: Fish Passage Design Coordination: Caltrans shall engage with CDFW in early and continued coordination before design commences as specified in **Recommendation 6 – Design Coordination with HabCon and Conservation Engineering** from the **COMMENT 1: Lake and Streambed Alteration Program Notification** section of this comment letter.

COMMENT 7: Bat Assessment and Avoidance

Issue: Page 3-21 of the IS/ND indicates multiple locations have the potential to support bats or contain roosting trees or potential roosting structures and facilities. Multiple bat species are identified within the Project limits as having suitable habitat including, but not limited to; Big Brown Bat (BIOS; DS-1828); Brazilian Free-Tailed Bat (BIOS; DS-2498); Townsends Big-Eared Bat (BIOS; DS-2496) and the Hoary Bat (BIOS; DS-2493). The IS/ND does not identify the extent to which impacts may occur to bats or their habitat from modification of existing structures or the removal of trees, this could result in substantial adverse effect on sensitive species and riparian habitat.

Recommendation: Modify measures AMM-BIO-16 and AMM-BIO-17 of the IS/ND to the following:

SA-1-6
(cont.)

SA-1-7

SA-1, California Department of Fish and Wildlife – Bay Delta Regio, page 12 of 17

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Ms. Arnica MacCarthy
California Department of Transportation

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February 17, 2023

Recommended Mitigation Measure 1 – Bat Habitat Assessment: A qualified biologist should conduct a habitat assessment within the Project limits for suitable bat roosting habitat. The habitat assessment shall include a visual inspection of features within 200 feet of the work area for potential roosting features including trees, crevices, portholes, expansion joints and hollow areas (bats need not be present). A report should be provided by the qualified biologist and incorporated into the subsequent draft IS/ND that includes a section discussing the locations of suitable bat habitat and if any bats or signs of bats (feces or staining at entry/exit points) are discovered. The surveys should occur at least two seasons in advance of Project initiation.

Recommended Mitigation Measure 2 – Bat Habitat Monitoring: If potentially suitable bat roosting habitat is determined to be present based on recommended mitigation measure 1 above, a qualified biologist shall conduct focused surveys at the trees, bridge(s), culverts and overpasses. Methods should include utilizing night-exit surveys, sound analyzation equipment and visual inspection within open expansion joints and portholes of the structures. Surveys should occur from March 1 to April 15 or August 31 to October 15 prior to construction activities. If the focused survey reveals the presence of roosting bats, then the appropriate exclusionary or avoidance measures will be implemented prior to construction during the period between March 1 to April 15 or August 31 to October 15. Potential avoidance methods may include temporary, exclusionary blocking, one-way-doors or filling potential cavities with foam. Methods may also include visual monitoring and staging of work at different ends of the Project to avoid work during critical periods of the bat life cycle or to allow roosting habitat to persist undisturbed throughout the course of construction. Exclusion netting or adhesive roll material shall not be used as exclusion methods. If presence/absence surveys indicate bat occupancy, then construction should be limited to avoid the most sensitive stages of the bat species life cycle (maternity/pupping season).

Recommended Mitigation Measure 3 – Bat Project Avoidance: If active bat roosts are observed during environmental assessments or during construction, at any time, all Project activities should stop until the qualified biologist develops a bat avoidance plan to be implemented at the Project site. Once the plan is implemented, Project activities may recommence in coordination with the natural resource agencies. The bat avoidance plan should utilize seasonal avoidance, phased construction, as well as, temporary and permanent bat housing structures developed in coordination with CDFW.

Recommended Mitigation Measure 4 – Permanent Bat Roost Design: Permanent bat roost structures shall be incorporated into the design of modified structures and on trees within the Project to avoid potentially significant impacts from permanent habitat loss to roosting bats. The structures should be designed in coordination with CDFW and include the appropriate baffle spacing or features to accommodate multiple species of bats as specified in the *Caltrans Bat Mitigation: A Guide to Developing Feasible and Effective Solutions Manual* (H.T. Harvey, 2019).

SA-1-7
(cont.)

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COMMENT 8: Light Impact Analysis and Discussion

Issue: Page 3-7 of the IS/NMD indicates temporary construction lights will be employed throughout the Project but the IS/ND does not disclose if any new permanent lights or replacement of previously existing light elements with new lighting technology will occur as a result of construction. Please indicate if new permanent light or replacement light elements are proposed. This could result in substantial adverse effect on sensitive species and riparian habitat.

Evidence the impact would be significant: Artificial night lighting can disrupt the circadian rhythms of many wildlife species. Many species use photoperiod cues for communication (e.g., bird song; Miller, 2006), determining when to begin foraging (Stone et al., 2009), behavior thermoregulation (Beiswenger, 1977), and migration (Longcore and Rich, 2004). For nocturnally migrating birds, direct mortality as a result of collisions with anthropogenic structures due to attraction to light (Gauthreux, 2006) is another direct effect of artificial light pollution. There are also more subtle effects, such as disrupted orientation (Poot et al., 2008) and changes in habitat selection (McLaren et al., 2018). Frogs and salamanders are particularly susceptible to artificial light pollution. Light pollution may affect physiology, behavior, ecology, and evolution of frog and salamander populations (Wise, 2007). For example, artificial light levels and timing influences melatonin production in salamanders. Melatonin regulates hormones, reproductive development and behavior, skin coloration, an animal's ability to regulate body temperature, and night vision (Gern, 1986). Reduced survival at the population level can result in smaller populations or populations that disappear altogether. Due to the high potential for migratory birds, songbirds, amphibians and mammals, including nocturnally active state listed and special-status species such as California tiger salamander and American badger, to occur within the Project limits, CDFW recommends no lighting is installed as a result of Project completion to avoid these potentially significant impacts.

Recommendation: If new or replacement lighting elements are proposed, CDFW strongly recommends that the Project does not propose to install new artificial light sources, especially in areas where no artificial light previously existed. In areas where new or replacement artificial light sources are installed CDFW recommends incorporation of the following:

Recommended Mitigation Measure 1 – Light Output Analysis: The Lead Agency should submit as part of the IS/ND Isolux Diagrams that note current light levels present during Pre-Project conditions and the predicted light levels that will be created upon completion of the Project. If an increase in light output from current levels to the projected future levels is evident, additional avoidance, minimization or mitigation shall be developed in coordination with the natural resource agencies to offset indirect impacts to fish and wildlife species. Within 60 days of Project completion the Lead Agency shall conduct a ground survey that compares projected future light levels with actual light levels achieved upon completion of the Project through comparison of Isolux

SA-1-8

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diagrams. If an increase from the projected levels to the actual levels is discovered additional avoidance, minimization or mitigation measures may also be required in coordination with the natural resource agencies. This analysis should be conducted across all potential alternatives and compared in table and map format.

Recommended Mitigation Measure 2 – Light Output Limits: All LED's or bulbs installed as a result of the Project shall be rated to emit or produce light at or under 2700 kelvin that results in the output of a warm white color spectrum.

Recommended Mitigation Measure 3 – Vehicle Light Barriers: Solid barriers at a minimum height of 3.5 feet should be installed in areas where they have the potential to reduce illumination from overhead lights and from vehicle lights into areas outside of the roadway. Barriers should only be utilized as a light pollution minimization measure if they do not create a significant barrier to wildlife movement. Additional barrier types should be employed when feasible, such as privacy slats into the spacing of cyclone fencing to create light barriers for areas outside the roadway.

Recommended Mitigation Measure 4 – Reflective Signs and Road Striping: Retro-reflectivity of signs and road striping should be implemented throughout the Project to reduce the need for electrical lighting.

Recommended Mitigation Measure 5 – Light Pole Modifications and Shielding: All light poles or sources of illumination that will be new or replacement installations of existing light sources should be installed with the appropriate shielding to avoid excessive light pollution into natural landscapes or aquatic habitat within the Project corridor in coordination with CDFW. In addition, the light pole arm length and mast heights should be modified to site-specific conditions to reduce excessive light spillage into natural landscapes or aquatic habitat within the Project corridor. In areas with sensitive natural landscapes or aquatic habitat, the Lead Agency should also analyze and determine if placing the light poles at non-standard intervals has the potential to further reduce excessive light pollution by decreasing the number of light output sources in sensitive areas.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDDB. The CNDDDB online field survey form and other methods for submitting data can be found at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The types of information reported to CNDDDB can be found at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Plantsand-Animals>.

SA-1-8
(cont.)

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FILING FEES

CDFW anticipates the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish and Game Code, § 711.4; Pub. Resources Code, § 21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.

CONCLUSION

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California's fish and wildlife resources. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

Questions regarding this letter or further coordination should be directed to Mr. Robert Stanley, Senior Environmental Scientist (Specialist), at (707) 339-6534 or Robert.Stanley@wildlife.ca.gov; or Mr. Wesley Stokes, Senior Environmental Scientist (Supervisory), at (707) 339-6066 or Wesley.Stokes@wildlife.ca.gov.

cc: State Clearinghouse #2023010380

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Response to Comments: Non-Profit Organizations

Comment NPO-1, Sonoma County Bicycle Coalition, page 1 of 3



Promoting the bicycle for transportation and recreation

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January 19, 2023

Caltrans District 4
Attn: Arnica MacCarthy, Senior Environmental Planner
P.O. Box 23660, MS-8B
Oakland, CA 94623-0660

Dear Ms. MacCarthy:

Thanks for meeting with me yesterday regarding the Highway 1 Rumble Strip project. I still couldn't find the report on the Caltrans website so I dug out the *Press Democrat* public notices section to get the direct URL and download the report. I have a few questions.

Regarding the purpose of the project (p. 1.1):

The purpose of the Project is to reduce the number and severity of head-on, cross-centerline, and run-off-road collisions in order to provide safe traffic operations on SR 1 and also to provide refuge areas for bicyclists to use when being passed by motorists on this stretch of the highway.

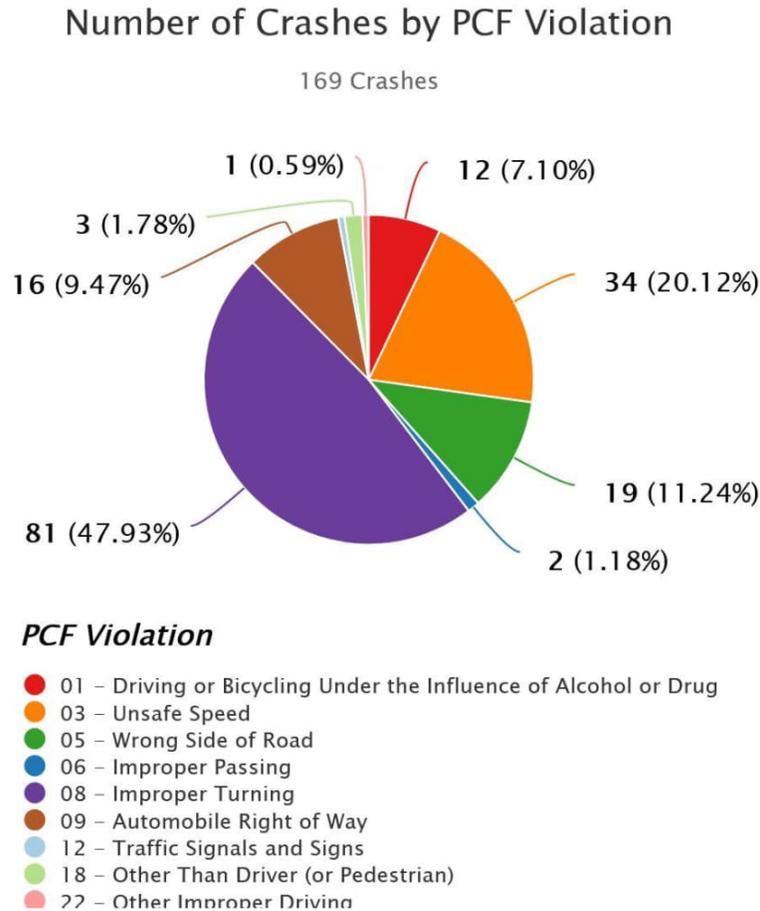
The current Two-and-Three-Lane Safety Monitoring Program has identified several head-on collisions, sideswipe collisions, and fatal collisions on SR 1 in Sonoma County. The 2012 California Roadway Departure Safety Implementation Plan (CA-RDSIP) (FHWA 2012) also identified SR 1 in Sonoma County as having fatalities from run-off-road accidents that meet the threshold for countermeasures. CA-RDSIP promotes the implementation of centerline rumble strips on two-lane undivided rural highways with a pavement width of at least 20 feet when thresholds have been met.

How many collisions? Where? I don't know anything about the Two-and-Three-Lane Safety Monitoring Program (and couldn't find it online) but I did search the Statewide Integrated Traffic Records System (SWITRS). There were 169 crashes on Highway 1 in Sonoma County in 2017-2021 (see chart below). Forty-eight percent were caused by improper turning and 20 percent by excessive speed. It is not clear to me how the installation of rumble strips would decrease these sorts of crashes.

NPO-1-1

Comment NPO-1, Sonoma County Bicycle Coalition, page 2 of 3

NPO-1-1
(cont.)



NPO-1-2

During our conversation you mentioned a similar project in Marin County, and the report states (p. 2.3):

To ensure the Project supports safe mobility for all users, a previous Caltrans centerline rumble strip project was analyzed. Centerline rumble strips were installed on SR 1 in Marin County, and collision data from before and after Project completion was analyzed. In conclusion, after the installation of centerline rumble strips, the percentage of bicycle-related collisions, head-on, and fatal collisions, have all decreased. Therefore, centerline rumble strip has been proven to increase the overall, multi-modal safety for all users.

Comment NPO-1, Sonoma County Bicycle Coalition, page 3 of 3

NPO-1-2
(cont.)

Again, what is the source of the data? I'd like to see the actual numbers. Did that project also widen the shoulder?

NPO-1-3

I already mentioned the inadequacy of the project's public outreach (one public notice in the section of the newspaper that nobody reads). In that notice, as well as on p. 4.1 of the report, are listed three libraries where a hard copy of the report resides: Guerneville, Rohnert Park/Cotati, and Sonoma. Guerneville makes sense as it is the closest to at least some sections of the coast; Rohnert Park is a little odd but Sonoma? Did anyone look at a map of the county? The town of Sonoma is the farthest away from the coast. Did you mean the Central Branch of the Sonoma County Library, which is in Santa Rosa?

NPO-1-4

I am going to engage in further research and will likely have additional comments, but at this point I have not been convinced that adding rumble strips to this stretch of highway is going to result in the greatest increase in safety for cyclists. (If you have better data on this please point me to it.) For an expenditure of \$23 million I'd rather see the shoulders widened and a dedicated bikeway installed along the entire corridor, reduced speed limits, and the installation of the "Bikes May Take Entire Lane" signs we discussed.

NPO-1-5

Finally, please do not repeat the line about "Caltrans is dedicated to complete streets/accessibility & safety for all users" immediately followed by a list of the reasons that whatever infrastructure change bike & pedestrian advocates are asking for "isn't feasible." I hear a version of this from every level of government and while it is likely intended to be reassuring, it is actually somewhat insulting. I will believe it when I see projects that put pedestrians and cyclists FIRST rather than treating us as an "add on" to roads that are designed primarily for autos.

Thanks for your consideration.

Sincerely,


Eris Weaver, Executive Director

Comment NPO-2, Sonoma County Bicycle Coalition, page 1 of 1



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NPO-2-1

15 February 2023

Caltrans District 4
Attn: Arnica MacCarthy, Senior Environmental Planner
P.O. Box 23660, MS-8B
Oakland, CA 94623-0660

Dear Ms. MacCarthy:

While we appreciate the effort to increase safety on Highway 1, this project seems to be considering bicyclists as an afterthought. We are concerned that a centerline rumble strip will deter cars from giving bicyclists a wide enough berth when passing. Given that many stretches of Highway 1 in Sonoma County have little or no shoulder, cars often need to cross the centerline to give bicycles a safe distance. With the impediment of a rumble strip, cars conceivably would be passing much closer to bicyclists than they are currently.

We recognize that Caltrans is aiming to address concerns around safe passage by widening the shoulder at 50 locations along the road. But the lack of a continuous shoulder puts the burden on bicyclists both to get out of the way of traffic and then move back into the travel lane when the shoulder disappears -- a situation that ultimately favors cars. If the project continues as proposed, visibility for bicyclists returning to the travel lane must be of paramount consideration when widening the shoulder.

We repeat our request for more transparency around the accident data that led to this project, as well as details regarding a similar, completed project on Highway 1 in Marin County and the effects it has had in reducing collisions there.

In a brief presentation to Sonoma's Countywide Bicycle and Pedestrian Advisory Committee in January, representatives from Caltrans acknowledged that the Sonoma County project does not "create the ideal bikeway" on Highway 1. A *continuous*, 6-foot-wide shoulder on Highway 1, however, would be a major step toward an ideal bikeway. We encourage Caltrans to put the \$23 million allotted for this project toward ensuring that a viable shoulder extends the length of Highway 1 in Sonoma County to increase safety for bicycles and cars alike.

Sincerely,

Emily Shartin

Advocacy and Communications Coordinator
Sonoma County Bicycle Coalition

Comment NPO-3, Sonoma County Regional Parks, page 1 of 5



SONOMA
COUNTY
REGIONAL
PARKS

Bert Whitaker
Director

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Emailed: son1centerlinerulestrip@dot.ca.gov

February 15, 2023

Arnica MacCarthy, Senior Environmental Planner
Caltrans, District 4
P.O. Box 23660, MS 8B
Oakland, Ca 94623-0660

Re: State Route 1 Centerline Rumble Strip Project
Draft Initial Study with Proposed Negative Declaration (January 2023)
State Route 1 – Sonoma County – PM 0.00 to 58.58

Dear Ms. MacCarthy:

Thank you for the opportunity to comment on the State Route 1 Centerline Rumble Strip Project. It is our understanding that the proposed project would include the installation of a centerline rumble strip and shoulder pavement widening to 6-feet at 50 spot locations which are identified in Tables 2-2 and 2-3. These improvements would improve the safety of motorists and bicyclists using State Route 1 to access many of the public parks and beaches on the coast. Widening the road pavement shoulders will also improve access for pedestrians. Sonoma County Regional Parks supports Caltrans efforts in making State Route 1 safer for motorists and bicyclists.

Regional Parks is working on the development of several sections of the California Coastal Trail which will also provide a safe pathway for bicyclists and pedestrians along the State Route 1 corridor. The specific Coastal Trail sections are identified in the subsequent paragraphs.

Timber Cover Trail (PM 34.63 to PM 38.16)

In 2015, Regional Parks completed the Timber Cove Trail Feasibility Study which evaluated a 2.5-mile-long preferred trail (aka Coastal Trail) alignment from Stillwater Cove Regional Park on the north end to Fort Ross State Historic Park on the southern end (PM 34.63 to PM 38.16). Parts of the preferred trail alignment would be located within the State right of way.

Per Table 2-3. Shoulder Widening Locations (ISND), no shoulder widening is proposed from PM 34.63 to PM 38.16 where a section of the proposed Coastal Trail would be located. If the shoulder widening limits are expanded at a later date to include PM 34.63 to PM 38.16, please contact and coordinate with Regional Parks. There may be opportunities where the shoulder widening could help improve sections of the Coastal Trail. Attached for reference are typical trail cross sections showing how bicycle and

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NPO-3-1

Comment NPO-3, Sonoma County Regional Parks, page 2 of 5

NPO-3-1
(cont.)



SONOMA
COUNTY
REGIONAL
PARKS

Bert Whitaker
Director

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SonomaCountyParks.org

pedestrian use can be accommodated within the State Route 1 corridor. The trail cross sections were taken from the Timber Cove Trail Feasibility Study.

Stewarts Point Ranch Trail (PM 48.74 to PM 48.20)

In March 2022, Regional Parks completed the Initial Study and Mitigated Negative Declaration for the North Coast Trails Project (aka Stewarts Point Ranch Trail and Kashia Coastal Reserve Trail). This section of the Coastal Trail is located off the highway on the west side of State Route 1. The trail connects to the highway at PM 48.74 and PM 48.20. Per Table 2-3. Shoulder Widening Locations (ISND), no shoulder widening is proposed from PM 48.74 to PM 48.20. If the shoulder widening limits are expanded at a later date to include PM 48.74 to PM 48.20, please contact and coordinate with Regional Parks.

Kashia Coastal Reserve Trail (PM 44.72 to PM 45.87)

This section of the Coastal Trail is on the west side of State Route 1. There are seven (7) general locations where the proposed trail alignments are located near or within the State Route 1. The seven locations are identified at PM 44.72, 44.82 (drainage), 44.97 (drainage), 45.32 (drainage), 45.54 (drainage), 45.68 (drainage) and 45.87. It appears that the proposed shoulder pavement widening at SB#38 (Location 54) is in proximity to PM 45.32.

Regional Parks is planning to advertise for construction bids for the North Coast Trails project in winter 2023 and completing trail construction in 2025. It is our understanding that Caltrans plans to start construction of the centerline rumble strip and shoulder pavement widening in January 2025. As Caltrans gets closer to finalizing the project schedule, please contact Regional Parks so that we can 1) review and provide input on the Caltrans improvement plans and 2) coordinate our construction activities.

If you have any questions, please contact me at 707-565-3348 or ken.tam@sonoma-county.org

Sincerely,

A handwritten signature in blue ink that reads "Kenneth Tam".

Kenneth Tam
Park Planner II

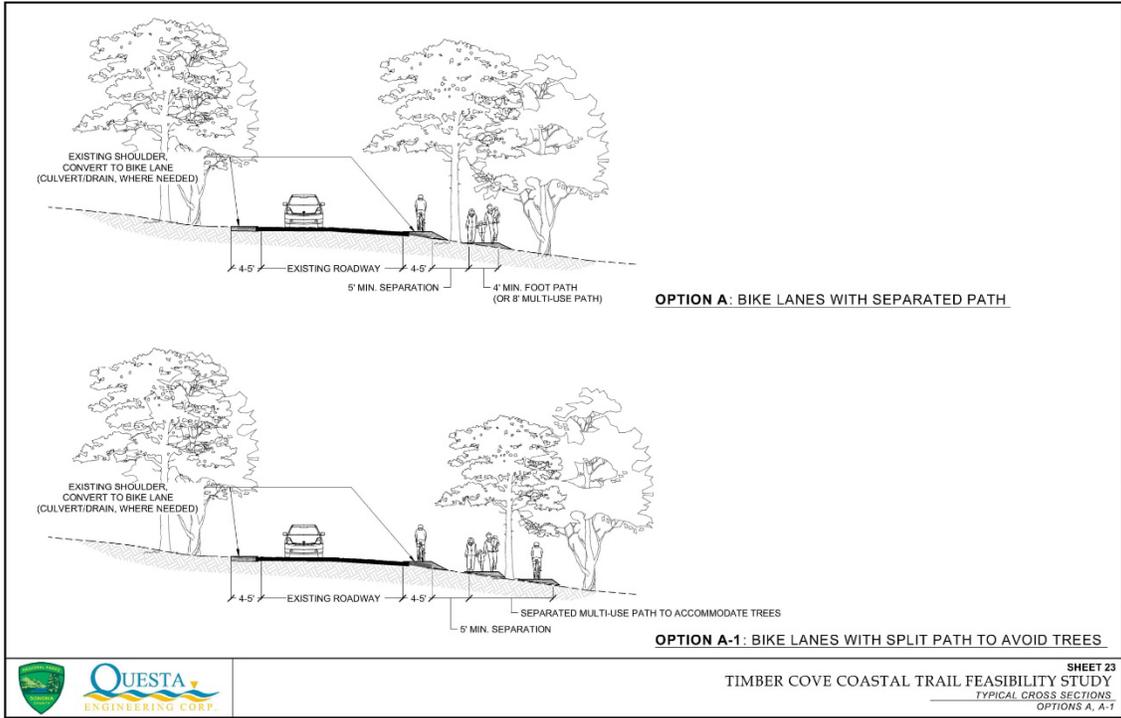
Enclosures: Timber Cove Trail Feasibility Study – Sheets 23, 24, 25

c: SPI: Stevan Hunter
Regional Parks: Steve Ehret, Mark Cleveland
Steven Schmitz, Sonoma County Transit, SCBPAC, CBPAC

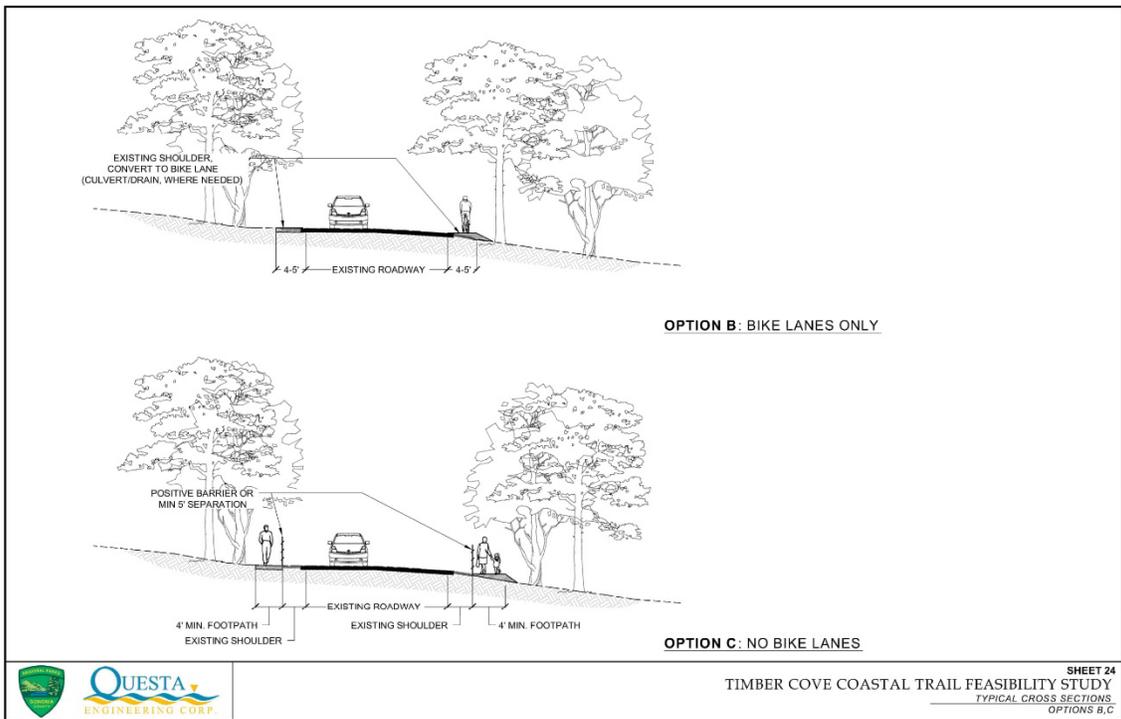
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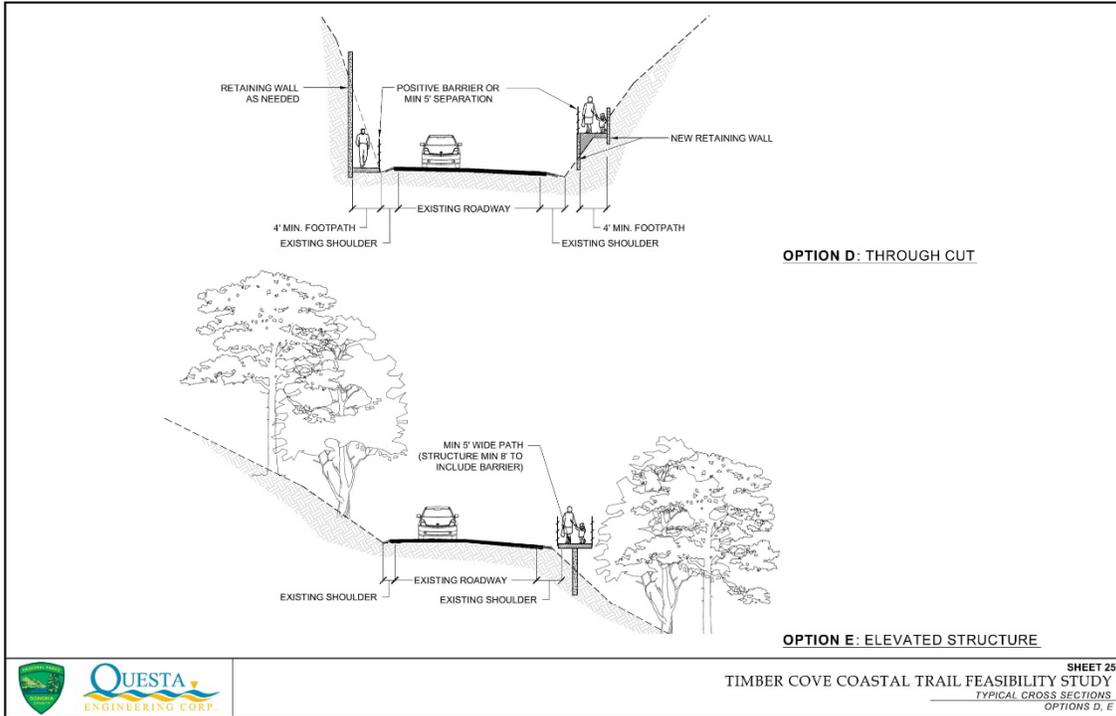
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Responses to Comments: Individuals

Comment IND-1, Brandyn Simpson, page 1 of 1

From: Brandyn Simpson <[REDACTED]>
Sent: Saturday, January 28, 2023 7:22 PM
To: Sonoma 1 Center Line Rumble Strip@DOT <son1centerlinerulestrip@dot.ca.gov>
Subject: Study

EXTERNAL EMAIL. Links/attachments may not be safe.

IND-1-1

I received the notice today the 28th of January. How many came to the meeting? I would think you might not be getting much controversy if this is any example of notice to the public. I think the bike riders should have separate paths for riding, the roads in this part of the County are too narrow for the bike riders. I'm surprised there are not more accidents. Brandyn Simpson, Occidental, CA

Comment IND-2, Claudia Collins, page 1 of 1

From: Claudia Collins <[REDACTED]>
Sent: Sunday, January 29, 2023 7:56 AM
To: Sonoma 1 Center Line Rumble Strip@DOT <son1centerlinerulestrip@dot.ca.gov>
Subject: Hwy 1 Marin County to Russian River/ Turnouts

EXTERNAL EMAIL. Links/attachments may not be safe.

Hello,

My family has had a home on Hwy 1 for 50 years at Portuguese Beach. I understand that two turnouts are planned in the 20 mile span between Hwy 1 and Russian River. As early as 20 years ago, this probably would have been sufficient but not any longer. This stretch of the Sonoma Coast is very crowded now, at least on the weekends. There are many mobile homes and many vehicles, and bicycles in general. The ocean side of the highway has very little room for error; we need many more turnouts in this area and they should be paved for safer travel. Impatient drivers will pass on a solid line if slower drivers don't have a chance to use available turnouts which has caused cars to go over the cliff as well as many fatalities.

Please, please, include more turnouts on this very popular 20 mile stretch of Hwy 1.

Thank you,
Claudia Collins

IND-2-1

Comment IND-3, Steve Dee, page 1 of 1

From: Steve Dee <[REDACTED]>
Sent: Tuesday, January 31, 2023 10:27 AM
To: Sonoma 1 Center Line Rumble Strip@DOT <son1centerlinerulestrip@dot.ca.gov>
Cc: Gary.helfrich@sonoma-county.org
Subject: State Route (SR) 1 Centerline Rumble Strip Project (IS/ND)

EXTERNAL EMAIL. Links/attachments may not be safe.

Dear Amica MacCarthy,

Thank you for the opportunity to review and comment on the proposed SR 1 Rumble Strip project. Although the proposed project would provide certain benefits to the motoring public, it at same time may create potential impacts that neighboring land owners and cyclists have expressed concern over, namely noise and parking conflicts along SR 1. For example, the proposed 6-ft wide shoulder along SR 1 will create a parking supply for commercial and recreational land uses in Jenner thereby increasing traffic congestion and circulation conflicts, as well as conflicts with bicyclists that would otherwise use the new shoulders for a safe and efficient bike trail. Many conflicting land use activities already exist in Jenner so adding improvements such as the proposed project should be done with care.

Adding noise generators (Rumble strips) and a tacit parking supply along SR 1 by widening the shoulder width could create secondary impacts under the provisions of CEQA. Therefore, please respond to the following comments on the subject proposed Negative Declaration:

- IND-3-1 | 1. Identify and mitigate to a less-than-significant level the potential noise impacts on neighboring land uses that will be generated by the proposed rumble strips.
- IND-3-2 | 2. Identify and mitigate to a less-than-significant level the potential conflict between parking supply created by the proposed shoulder widening and the need for an adequate and safe bicycle path.

Feel free to contact me at [REDACTED] if you have any questions.

Thank you,

Steve Dee

Comment IND-4, Pat Paterson, page 1 of 2

From: Pat Paterson <[REDACTED]>
Sent: Wednesday, February 15, 2023 12:00 AM
To: Sonoma 1 Center Line Rumble Strip@DOT <son1centerlinerulestrip@dot.ca.gov>
Subject: Rumble strips and turnouts

EXTERNAL EMAIL. Links/attachments may not be safe.

Attn: Arnica MacCarthy

Rumble strips

IND-4-1

Rumble strips should not be used in areas where the roadway frequently floods. Traffic must drive around the frequent flooding and ponding on the sides of highway 1. My wife had to detour on to State Route One in Marin County when Valley Ford Road flooded. It was dark and she did not realize there were newly installed rumble strips until she crossed the center line and was assaulted by the rumble strips. You should not put rumble strips where the roadway habitually floods or ponds for that reason. State Route 1 frequently floods in the S-curves just north of Valley Ford Road, mile post 1SON00.50 to 1SON01.00 and rumble strips should never be installed there.

Turnouts

IND-4-2

When I attended the Sonoma County MAC meeting regarding the widening of SR 1's shoulders and brought up the subject of turnouts, I was told to email you.

There are only 4 turnouts in the 20 miles between the Sonoma County Line the Russian River Bridge. They are too short for vehicles that are large enough to impede traffic to use. Some are poorly placed. When you widen the shoulders on State Route 1 please address the deficient turnouts. I am a retired highway patrolman that has worked/lived off SR 1 for 25 years. I collect antique trucks and have had a commercial license with endorsements.

Valley Ford Turnout southbound 1SON02.20 which is just south of Valley Ford Freestone Road, is properly located in a flat straight away and even though it is parallel to the old highway it is too short. The old highway is so wide that Caltrans sometimes parks equipment on it. Usually, the traffic that use this turnout are lost motorist updating their navigation system (as seen on the current Google Street View).

Bean Ave Turnout northbound 1SON12.40 which is at Bean Ave, is only about a half of a dozen car lengths long and on a sharp curve that limits view of approaching traffic. This turnout ends at the creek. The main use of this turnout is bird watching.

Salmon Creek Beach Turnout 1SON12.70, is properly located in a very long straightaway however it still too short for descending heavy vehicles to normally use. It is also poorly marked. The "Turnout" sign shares a signpost with a tsunami evacuation route sign which is much larger and brighter than the turnout sign. The pavement is not marked

Comment IND-4, Pat Paterson, page 2 of 2

IND-4-2
(cont.)

with a red border, "Turnout" or "No Parking" so it fills up with parked cars during good weather. Only one No Parking sign is left. The other wooden No Parking signposts have been broken off.

Comment IND-5, Les and Sheryl Erbst, page 1 of 1

1/28/23, 4:34 PM

Text

Att: Amica MacCarthy, Senior Environment Planner
Caltrans District 4
PO Box 23660,MS-8B
Oakland, Ca.94623-0660

Ms. MacCarthy,

I am writing in protest of the planned State Rt. 1 Centerline Rumble Strip Project. I received the small post card notice on January 28 2023 so I was not aware and able to attend the zoom meeting held on January 19.

I reviewed the proposal and found that one of the spot locations is directly in front of my house apparently the only such situation in the entire length of the project. That would be SB#2 Location 6 and my address is [REDACTED]. My house sits less than 100 feet from the road and the addition of a rumble strip would have devastating effects on our quality of life. There is also less than 25 feet from the highway to the easement road in front of my house and losing an additional 6 feet for a bicycle lane would create an even smaller and unsafe buffer between the highway and easement road.

The loud noise from the rumble strip would be heard and felt inside our house ruining our quality of life and potentially decreasing our property value and desirability of our property. It would disturb and potentially frighten our pets and livestock. We would be unable to sleep or eat in peace and could have a negative impact on our mental and physical health.

Obviously this was not taken into consideration by Caltrans when doing your impact study so I would ask that this spot location be removed and that the rumble strip not be installed in front of our home. There is no need for it as the piece of road sits between two sharp bends in the highway that requires traffic to go slowly. In my 27 years here there has never been an accident caused by anyone crossing the center line.

Please contact me asap to discuss and resolve this matter.

Thank you,

Les and Sheryl Erbst
[REDACTED]

IND-5-1

Table F-1. Responses to Comments

Commenter	Comment Number	Comment	Response
<p>Ms. Erin Chappell, Regional Manager, California Department of Fish and Wildlife – Bay Delta Region</p>	<p>SA-1-1 COMMENT 1: Lake and Streambed Alteration Program Notification</p>	<p>Issue: The IS/ND does not provide adequate detail of the permanent and temporary impacts that have the potential to occur within the bed, bank, channel, and riparian habitat associated with the Project. This could have the potential for a substantial adverse effect on riparian habitat.</p> <p>Recommendation: CDFW recommends the Lead Agency include a determination on the permanent and temporary impacts to bed, bank, channel, and upland riparian habitat associated necessary to widen the roadway and modify culverts. The updated IS/ND should also specify which segments of the roadway will require roadside slope increases and additional hardscape installations.</p> <p>Recommendation 1 – Seasonal Work Window: Measure PF-BIO-1 in the IS/ND should be updated to incorporate specific seasonal work windows within aquatic features that may impact bed, bank, channel, or riparian habitat. The recommended work window is June 15 to October 15. The measure should also be updated to include language that indicates no work shall occur within 24 hours of a rain event predicated at a chance of 40% or more according to the National Weather Service.</p> <p>Recommendation 2 – Culvert Impact Inventory Report: A culvert impact inventory should be developed that placed additional columns in Table 1-1 and/or Table 2-3 of the IS/ND. The additional columns should include a column for temporary impacts, permanent impacts, and a column for fish passage status in the Fish Passage Database (Fish-PAD; Biological Information and Observation System (BIOS); DS-69). A column should also be included for terrestrial crossing potentials at each culvert location within the Project limits. A final column should be included that identifies if excavation and/or increase of the slope is necessary to install Project related components identified in the Project Description of this comment letter.</p> <p>Recommendation 3 – Geo-Textiles, Filter-Fabric and Cementitious Material: CDFW recommends the design or re-design of any culverts within the Project does not employ geo-textils, filter fabric, or cementitious material within rock slope protection fields of drainage outfalls. A granular filter design should follow the principles outlined in the <i>Federal Highway Administrations’ Hydraulic Engineering Circular No. 23 (HEC-23) – Bridge Scour and Stream Instability Countermeasures – Third Edition Volume 2</i> (Lagasse et al, 2009) and <i>Caltrans’ Design Information Bulletin No. 87-01 – Hybrid Streambank Revetments</i> (Caltrans, 2014) for design guidance on granular filter designs. In the event work is occurring within a salmonid bearing system, fish spawning gravel should be incorporated into the channel design where appropriate. Size selection should be conducted in close coordination with CDFW. Gravel should consists of clean, creek-run rock, 0.25 to 10.2 centimeters in size.</p> <p>Recommendation 4 – Restoration and Mitigation Planning: CDFW strongly recommends the Lead Agency develop a mitigation plan in coordination with CDFW for any permanent Project impacts that cannot be avoided that will be subject to LSA permitting and include that plan as park of the updated IS/ND. The mitigation concept provided in BIO-AMM-19 for restoration, enhancements to mitigation at a 1:1 ratio for permanent impacts does not appear to appropriately reduce potentially significant impacts to fish and wildlife resources below a level of significance. The mitigation plan should include in detail any proposed on and/or off-site mitigation needs necessary to compensate for net-loss of river or stream resource including, but not limited to, tree trimming, tree removals, hardscape materials and geo-textil fabric within the bed, bank or channel of a stream, loss of riparian vegetation and mature trees, and expansion of existing infrastructure footprint(s). CDFW recommends proposed mitigation plan(s) include details such as engineered design drawings, mitigation location(s), proposed actions, monitoring, success criteria and any corrective actions.</p> <p>Recommendation 5 – Culverts in High Fire Hazard Severity Zones: Figure 3-1 of the IS/ND includes 15 High Fire Hazard Severity Zones maps that indicate the Project occurs within Moderate, High and Very High Fire Severity Zones. CDFW recommends the reliance on non-plastic-based materials in instances where culverts are modified, replaced, or reconstructed to prevent the potential for fire events to melt the material and increase micro-plastic pollution within the environment. CDFW recommends the use of corrugated metal pipe or steel pipes for permanent culvert replacement or modification applications and when employing temporary stream diversions systems in High to Very High Fire Severity Zones.</p>	<p>The Project’s biological study area (BSA) contains California Department Fish and Wildlife (CDFW) jurisdictional streams and riparian habitat. CDFW stream jurisdiction extends to the top of bank or, if present, the edge (i.e., drip line) of the riparian canopy. Constructed roadside drainage ditches and culverts included in the Project scope of work were evaluated and determined to not be considered CDFW-jurisdictional streams. CDFW-jurisdictional streams are present adjacent to three locations (Locations 9, 29, and 34) within the BSA; however, no impacts to bed, bank, or channel are proposed. A total of 0.109 acre of CDFW-jurisdictional riparian habitat was delineated within the BSA. The Project would temporarily impact 0.016 acre and permanently impact 0.005 acre of CDFW-jurisdictional riparian habitat. Impacts to riparian habitat would result from clearing for shoulder widening and access for equipment and staging. All impacted riparian habitat would be recontoured and impacted areas would be revegetated following Project completion and therefore impacts to CDFW-jurisdictional streams and riparian habitat would be less than significant and Caltrans determined that no changes to the FED are warranted.</p> <p>The recommended seasonal work window of June 15 to October 15 is not proposed for this Project because there is no need for a seasonal avoidance in regards to CEQA impacts for this Project.</p> <p>Culvert modifications arenot included in the Project scope of work and therefore a culvert impact inventory report is not warranted. In the unlikely event that culvert modification is deemed necessary during PS&E phase, Caltrans will consider CDFW-recommended culvert design, including non-plastic-based materials, and looks forward to coordinating with CDFW during that time.</p> <p>There are no Project impacts that warrant mitigation under CEQA. In the event that design changes result in significant impacts to fish and wildlife resources, coordination with HabCon will be initiated; however, Project impacts to fish and wildlife resources are considered less than significant under CEQA.</p>

Commenter	Comment Number	Comment	Response
		<p>Recommendation 6 – Design Coordination with HabCon and Conservation Engineering: Early coordination with the CDFW Habitat Conservation Program (HabCon) and the Conservation Engineering Branch is recommended to provide review and analysis of any proposed staging, access roads, structures or Project elements with the potential to impact fish and wildlife resources. Provide the CDFW Conservation Engineering Branch engineered drawings, a basis of design report and Project specifications during the initial design process, prior to design selection and re-initiating design consultation at 30% design at minimum, and through the permitting process for review and comment.</p>	
<p>Ms. Erin Chappell, Regional Manager, California Department of Fish and Wildlife – Bay Delta Region</p>	<p>SA-1-2 COMMENT 2: Bridge Runoff Capture Systems</p>	<p>Issue: The IS/ND indicates 4.05 acres of impervious surface will be impacted and the roadway widening will increase the surface area of impervious surfaces throughout the Project. The Project Description also indicates that numerous culverts and drainage systems have the potential to be modified. Impervious surfaces, stormwater systems, and storm drain outfalls have the potential to significantly affect fish and wildlife resources from polluted water by altering the hydrography of natural streamflow patterns via concentrated run-off that enters streams and associated systems from the road. The IS/ND PF-BIO-5 indicates bio-filtration strips and swales will be employed to the maximum extent practicable. The Project Description wording is vague because it does not indicate if the installation of any new bio-filtration strips or swales will actually occur or where they may be placed. This could have the potential for a substantial adverse effect on sensitive species.</p> <p>Evidence the impact would be significant: Urbanization (e.g., impervious surfaces, stormwater systems, storm drain outfalls) can modify natural streamflow patterns by increasing the magnitude and frequency of high flow events and storm flows (Hollis 1975, Konrad and Booth, 2005). A review by Eisler (1987) indicates elevated incidence of tumors and hyperplastic diseases, and some circumstantial evidence about cancers, in fish in areas with high sediment Polycyclic Aromatic Hydrocarbon (PAH) levels. Arsenic, cadmium, chromium, lead, mercury, nickel, and zinc have been detected in streambed sediments and Stormwater Runoff in the tissue of fish, indicating bioaccumulation of these metals in the environment (MacCoy and Black, 1998). Lead concentrations in benthic insects, and nickel and cadmium levels in certain fish were found to be related to traffic density and sediment levels of these constituents (Van Hassel, 1980). Acute toxicity and mortality have also been tied to immediate road runoff from a compound occurring in tires, 6PPD-Quinnone, that has been linked to Coho mortality (Tian, 2021).</p> <p>Recommendation 1: Bridge Capture Runoff System: CDFW recommends the Project design incorporate specific bio-filtration strips, swales and other storm water capture run-off systems throughout the Project. The storm water capture runoff systems shall prevent direct runoff of untreated water from the roadway into creeks, drainages or swales. The stormwater runoff system shall direct runoff to a land-based bio-filtration system or a mechanical filter system to avoid, minimize and treat any discharge water. Reference the Bridges Stormwater Runoff from Bridges Final Report to Joint Legislation Transportation Oversight Committee, beginning on page 2-12 of the report for examples of an appropriate runoff capture system design.</p>	<p>The new impervious surface created by the shoulder widening could increase runoff; however, it has been determined that the existing drainage facilities, such as cross culverts and roadside ditches, have the capacity to handle this slight increase and the existing drainage patterns at the 50 shoulder widening spot locations would be maintained. Additionally, the total new impervious surface due to the shoulder widening would be 4.05-acres along the 58.58 miles of the Project corridor, and is considered only a minor increase. No bridge or culvert modifications are proposed in the Project scope of work. The Project is anticipated to establish permanent erosion control measures such as bio-filtration strips or swales to receive storm water discharges from the highway or other impervious surfaces. The locations of bio-filtration strips or swales will be determined during the PS&E phase. This would further minimize the potential for new impervious surfaces to significantly affect fish and wildlife resources by preventing direct runoff of untreated water from the roadway into creeks, drainages, or swales and therefore impacts to bed, bank, channel, and upland riparian habitat would be less than significant.</p>
<p>Ms. Erin Chappell, Regional Manager, California Department of Fish and Wildlife – Bay Delta Region</p>	<p>SA-1-3 COMMENT 3: Tree Removal Analysis</p>	<p>Issue: Page 3-6, Section 3.3.1 of the IS/ND indicates that trees will be trimmed or removed throughout the Project. The IS/ND does not provide a map, figure, or specific inventory of trees proposed for trimming or removal which would allow CDFW to assess the impact of the activity to fish and wildlife resources as it pertains to trees. This could have the potential for a substantial adverse effect on riparian habitat and sensitive species.</p> <p>Recommendation 1 - Tree Inventory Report: Provide a tree inventory that includes a map or figure that identifies the location, species, diameter at breast height, estimated age, and overall health of all trees proposed for removal and trimming.</p> <p>Recommendation 2 - On-Site Preservation of Forest Trees and Riparian Trees: Impact to trees should be avoided to the maximum extent feasible and additional designs should be incorporated to minimize impacts on mature native trees and riparian resources.</p> <p>Recommendation 3 - Restoration and Mitigation Planning: Reference Recommendation 4 - Restoration and Mitigation Planning from the COMMENT 1: Lake and Streambed Alteration Program Notification section of this comment letter.</p>	<p>There are 73 trees present within the BSA; of these, 41 trees occur within the Project footprint. 17 of the trees are located within CDFW-jurisdictional riparian habitat; of these, 12 riparian trees are within the Project footprint. Where trees are adjacent to shoulder widening, avoidance and/or minimization measures, such as design modifications and delineating trees with environmentally sensitive area fencing, would be evaluated during PS&E and implemented in construction so impacts to mature native trees and riparian resources would be avoided to the maximum extent feasible, and therefore impacts to fish and wildlife resources related to tree removal would be less than significant.</p>

Commenter	Comment Number	Comment	Response
Ms. Erin Chappell, Regional Manager, California Department of Fish and Wildlife – Bay Delta Region	SA-1-4 COMMENT 4: Northern Spotted Owl Avoidance and Minimization	<p>Issue: Northern Spotted Owl (NSO) is federally listed as threatened under the Endangered Species Act (ESA) and is CESA listed as threatened. The potential impacts identified within the IS/ND to suitable NSO habitat may not adequately describe all the potential permanent and temporary impacts to NSO habitat. If the proposed measures are not updated as identified in the section below for NSO, the Project could have the potential for a substantial adverse effect on sensitive species.</p> <p>Evidence the Impact is Significant: The Project occurs within potential NSO habitat according to Spotted Owl Predicted Habitat (BIOS; DS-2185) and within NSO Habitat for Connectivity Modeling (BIOS; DS-876). In addition, 200 detections occur within 5 miles of the Project, 6 of those detections occur within 0.33 to 1.07 miles as noted on page 3-17 and 3-18 of the IS/ND. The Project also proposes the removal of an unspecified number of trees and indicates impact to 0.178 acres (temporary and permanent combined) of NSO habitat. CDFW recommends additional habitat analysis is conducted as the impact footprint may be larger than initially described. NSO is typically associated with old-growth or mature forests, but NSO can utilize a wide variety of habitat types, including oak woodlands. They exhibit flexibility in their use of different forested areas for nesting, roosting, and feeding requirements. Typical habitat characteristics include a multi-storied structure and high canopy cover (Thome, 1999). Impacts from the Project would be significant if NSO nests or nesting trees were cut down or if nearby nesting NSO were exposed to elevated sound levels or human presence that would cause nest abandonment.</p> <p>Recommendation 1 Nest Avoidance Buffer and Seasonal Work Window: AMM BIO-6 and AMM BIO-7 should be updated as follows: To reduce impacts to less-than-significant, no Project activities shall occur within 0.25 miles of NSO nesting habitat from March 15 to August 31, unless NSO surveys have been completed by a qualified biologist following the U.S. Fish and Wildlife Service (USFWS) Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls, dated (revised) January 9, 2012 and the survey report is accepted by CDFW in writing. If breeding NSO are detected during surveys, a 0.25-mile no-disturbance buffer zone shall be implemented around the nest. NSO surveys shall be conducted for each year Project construction occurs. No Project activities shall occur within the buffer zone until the end of the breeding season, or a qualified biologist determines that the nest is no longer active, unless otherwise approved in writing by CDFW. Alternate buffer zones may be proposed by a qualified biologist after conducting an auditory and visual disturbance analysis following the USFWS guidance, Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California, dated October 1, 2020. Alternate buffers must be approved in writing by CDFW. Survey results shall be provided to the Spotted Owl Observations Database at https://wildlife.ca.gov/Data/CNDDDB/Spotted-Owl-Info. If NSO are detected, CDFW and the USFWS shall be immediately notified.</p> <p>Recommendation 2 California Endangered Species Act Consultation for Northern Spotted Owl: If Project activities may result in take of NSO, the Project proponent shall apply for and obtain a CESA Incidental Take Permit from CDFW prior to beginning the Project.</p>	<p>A habitat assessment survey for NSO was performed on May 5 and 6, 2022 to determine whether suitable NSO breeding habitat was present at, or adjacent to, each of the Project widening locations, and whether conditions within the surrounding BSA support suitable nesting or foraging habitat. The survey found that there is suitable NSO forest habitat (Douglas fir [<i>Pseudotsuga menziesii</i>] forest, redwood [<i>Sequoia sempervirens</i>] forest, or bishop pine [<i>Pinus muricata</i>] forest) present within the BSA. However, where these trees are adjacent to shoulder widening, avoidance and/or minimization measures, such as design modifications and delineating trees with environmentally sensitive area fencing, would be evaluated during PS&E and implemented in construction so impacts to suitable NSO nesting trees would be avoided to the maximum extent feasible. Therefore, potential impacts to NSO would be limited to temporary impacts to NSO habitat associated with vegetation removal and indirect auditory and visual disturbance to NSO during construction activities. Because vegetation removal would occur along or adjacent to roadway embankment that is subject to regular disturbance from a highly traveled roadway (SR 1), the temporary loss of this potential habitat is not likely to adversely affect the local population.</p> <p>Additionally, all temporarily disturbed areas will be revegetated following construction. Based on the duration of disturbance and minimal level of construction efforts required to install the centerline rumble strips and shoulder widening, these actions are not expected to rise to the level of harm as defined under CESA. Additionally, the closest NSO Activity Center, associated with six detections of NSO ranging from 0.33 mile to 1.07 miles away from Location 33, is outside of the 165-foot auditory and visual disturbance buffer.</p> <p>With implementation of PF-BIO-9, as well as AMM-BIO-6 and AMM-BIO-7 pre-construction NSO surveys would be conducted during the NSO nesting season within 165 feet of suitable NSO habitat and suitable buffers would be implemented as necessary to ensure no nesting NSO are present within the auditory and visual disturbance buffer. Therefore, the implementation of the nest avoidance buffer and seasonal work window measure proposed by CDFW would not be necessary and impacts to NSO and its habitat would be less than significant. The Project is not anticipated to result in take of NSO and therefore a CESA Incidental Take Permit from CDFW will not be obtained.</p>
Ms. Erin Chappell, Regional Manager, California Department of Fish and Wildlife – Bay Delta Region	SA-1-5 COMMENT 5: Terrestrial Wildlife Connectivity	<p>Issue: The Project has the potential to significantly impact terrestrial wildlife connectivity over a 58.58-mile linear segment of highway on SR-1 in Sonoma County. The surrounding habitat supports threatened, endangered, special-status and native species including, but not limited to, California Giant Salamander (CGS), Foothill Yellow-Legged Frog (FYLF), California Red-Legged Frog (CRLF) and Red-Bellied Newt (RBN). Page 2-5 to 2-6 of the IS/ND notes drainage system extensions, modifications and roadway widening may require an increase in the slope of the road invert to 2:1. The increase of the slope at the edge of the roadway or modification of multiple culverts may have the potential to create a series of impassable barriers over a 58.58-mile segment of SR-1 that could substantially interfere with the movement of small herpetofauna.</p> <p>Evidence the impact would be significant: California wildlife is losing the ability to move and migrate as habitat conversion and built infrastructure disrupt species habitat and cuts off migration corridors (Senate Bill 790; SB-790; https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=20210220SB790). The current baseline condition of the area proposed for construction represents a semi-permeable barrier to wildlife connectivity. Larger wildlife species may cross at their own risk of injury or mortality but smaller species such as herpetofauna would most likely not cross the highway successfully without incurring</p>	<p>Caltrans acknowledges that the current highway hinders the movement and dispersal of small animals, however all impacts of the Project are assessed in comparison to this existing condition. The Project does not propose significant impacts under CEQA due to culvert modifications and/or an increase in the slope at the edge of the highway along the 58.58-mile Project corridor. None of the Project components would create a non-permeable barrier to terrestrial wildlife connectivity for herpetofauna.</p> <p>While Caltrans agrees that adding terrestrial connectivity elements such as wildlife friendly culverts, under-crossings, elevated causeways and over-crossings, as well as drainage escape structures such as escape ramps, floating refuge buckets, and amphibian ladders would be beneficial additions to SR 1 in Sonoma County, those design features are not part of the Project scope and therefore will not be included in this Project. However, Caltrans will consider scoping for these design features for a future project along SR 1 in Sonoma County.</p> <p>If the Project design changes during a later project phase, and culvert reconstruction is added to the scope, Caltrans will implement CDFW's recommendation of installing wildlife friendly culverts.</p>

Commenter	Comment Number	Comment	Response
		<p>injury or mortality. Further modification of the culverts and an increase in the slope at the edge of the roadway along the 58.58- mile segment of SR-1 has the potential to create a non-permeable barrier to terrestrial wildlife connectivity for herpetofauna, even if the construction occurs in focused segments.</p> <p>Page 3-16 of the IS/ND indicates the Project occurs within the current range of CRLF and 20 California Natural Diversity Database (CNDDDB) occurrences reside within 2 miles of the Project. Numerous aquatic resources (e.g., drainages, streams, creeks, and ponds) are also located within 2 miles of the Project. Page 3-17 of the IS/ND indicates FYLF occurs in several creeks in the vicinity of the Project, and suitable non-breeding FYLF habitat is present throughout the Project. There are 11 CNDDDB occurrences of FYLF within 2 miles of the Project, most of which are located toward the northern end of the Project limits. Page 3-22 indicates 14 CNDDDB occurrences of CGS within 2 miles of the Project. Additionally, surveyors discovered two juvenile CGS within a creek in the Caltrans right-of-way adjacent to Location 49. Page 3-22 of the IS/ND indicates three CNDDDB occurrences of RBN within 2 miles of the Project. Wetlands, waters, and riparian and forested areas within the Project vicinity could provide suitable habitat for these species. The Project should incorporate a wildlife connectivity analysis and highway system facility modification designs to ensure connectivity remains and the potential for mortality is reduced for herpetofauna.</p> <p>Recommendation Mitigation Measure 1 Wildlife Connectivity: Terrestrial connectivity elements such as wildlife friendly culverts, under-crossings, elevated causeways and over-crossings should be programmed into the Project as design features. To inform design and placement of connectivity features, the Lead Agency shall develop a wildlife movement study. The study should occur over a minimum period of 12 months prior to the initiation of construction and preferably be incorporated into the draft IS/ND. The study shall occur within the limits of the proposed Project to develop a baseline understanding of the areas where wildlife movement and crossings are most prevalent. The study should also be utilized to inform Project design to identify areas where wildlife crossing structure(s) installation(s) would result in the largest benefit to rare, threatened, and endangered species, as well as, special-status species and non-special status species for wildlife connectivity. Analysis during the 12-month study shall be utilized to determine the type, size and number of structures that would be most beneficial to facilitate wildlife connectivity (new wildlife crossing culverts, modification of existing culverts, wildlife crossing bridges, etc.). Upon completion of the Project, the wildlife connectivity structures should be studied for an additional 12-month period, at minimum, to determine the effectiveness of structure utilization by wildlife. The protocol for the baseline survey, post-construction surveys, site selection criteria and design criteria for the development of the wildlife connectivity structures should follow the protocols outlined in; The California Department of Transportation (Caltrans), Wildlife Crossings Design Manual (Caltrans, 2009) and the Federal Highway Administration Wildlife Crossing Structure Handbook Design and Evaluation in North America, Publication No. FHWA-CFL/TD-11-003 (FHWA, 2011).</p> <p>Recommendation Mitigation Measure 2 Wildlife Connectivity: The Lead Agency should develop a series of heat maps for target species along the SR-1 corridor using high value resource layers including, but not limited to, species presence/absence, drainages, culverts, creeks, road-strike data, and wildlife linkage corridors for pinpointing key wildlife crossing locations with high permeability and potential for use by target species.</p> <p>Recommendation Mitigation Measure 3 Drainage Escape Structures: The Lead Agency should design and implement, in coordination with the natural resource agencies, escape structures for small herpetofauna when drainage systems and culverts are not conducive for crossing and entrapment within the system is likely. Escape structure can include, but not be limited to, escape ramps, floating refuge buckets and amphibian ladders (McInroy, 2015 and Schelbert, 2009).</p>	
<p>Ms. Erin Chappell, Regional Manager, California Department of Fish and Wildlife – Bay Delta Region</p>	<p>SA-1-6 COMMENT 6: Fish Passage Assessment</p>	<p>Issue: Multiple potential fish passage barriers and unassessed locations exist within the identified Project limits. Senate Bill 857 (SB-857), which amended Fish and Game Code § 5901 and added § 156 to the Streets and Highways Code states in § 156.3, “For any project using state or federal transportation funds programmed after January 1, 2006, [Caltrans] shall ensure that, if the project affects a stream crossing on a stream where anadromous fish are, or historically were found, an assessment of potential barriers to fish passage is done prior to commencing project design. [Caltrans] shall submit the assessment to the [CDFW] and add it to the CALFISH database. If any structural barrier to passage exists, remediation of the problem shall be designed into the project by</p>	<p>No work is anticipated related to culverts or stream crossing and the Project will not affect a stream crossing on a stream where anadromous fish are, or historically were found. Therefore, a fish passage assessment is not required. Additionally, the wetlands and other waters that would be impacted by the Project are not suitable habitat for anadromous fish and therefore there is no potential for special-status fish species to occur within the Project footprint.</p> <p>If the Project scope changes in a later Project phase and therefore affects a stream crossing on a stream where anadromous fish are, or historically were found, then fish passage assessments</p>

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		<p>the implementing agency. New projects shall be constructed so that they do not present a barrier to fish passage. When barriers to fish passage are being addressed, plans and projects shall be developed in consultation with the [CDFW]." The modification of unidentified culverts over 58.58 miles on SR-1 could substantially interfere with the movement of native resident or migratory fish.</p> <p>Evidence the impact would be significant: The Project contains stream crossings within areas mapped as historic or current watersheds where anadromous fish are, or historically were found. The species include, but are not limited to, Central California Coast Coho Critical Habitat and Range (BIOS; DS-3015 and DS-1277), California Coast Fall Chinook Salmon Range (BIOS; DS-1297) and Central California Coast Steelhead and Coastal Steelhead Trout Waters (BIOS; DS-1287 and DS-962). The decline of naturally spawning salmon and steelhead trout is primarily a result of the loss of appropriate stream habitat and the inability of fish to get access to habitat, according to reports to the Fish and Game Commission and by CDFW (CDFW, 1996). Restoration of access to historical spawning and rearing areas should be incorporated into the Project design through barrier modification, fishway installation, or other means (CDFW, 1996).</p> <p>Recommendations: If barriers or unassessed barriers noted within the Project limits are found to be a barrier to fish passage, remediation of the problem should be designed into the Project by the implementing agency as a Project feature in consultation with CDFW and other natural resource agencies. The fish passage section should discuss the current status of each crossing location noted within the Fish Passage Assessment Database (BIOS; DS-69) from Table 1-1 and Table 2-3 of the IS/ND. First pass and/or second pass fish assessments, as necessary, and images of the upstream and downstream ends of water conveyance structure should be included in the updated IS/ND. Presenting the information in table format with corresponding maps is also strongly recommended.</p> <p>Recommended Mitigation Measure 1: Fish Passage Assessment: To evaluate potential impacts to native fish species and fisheries resources, Caltrans should submit the assessment to the CDFW and add it to the CALFISH database. If any structural barrier to passage exists, remediation of the problem shall be designed into the Project by the implementing agency. New projects shall be constructed so that they do not present a barrier to fish passage. When barriers to fish passage are being addressed, plans and projects shall be developed in consultation with CDFW. CDFW shall be engaged prior to design in early coordination and at 30% design at minimum.</p> <p>Recommended Mitigation Measure 2: Fish Passage Assessment Table: The Lead Agency shall develop a table for incorporation into the IS/ND that notes all proposed locations of work identified in Table 1-1 and 2-3 of the IS/ND and provide a corresponding column that indicates known culverts within the location of the proposed work. The table should identify the Fish PAD ID number, barrier status and the results of any primary or secondary fish passage assessments. CDFW will need this assessment and information in order to process an LSA Agreement Notification for the proposed Project.</p> <p>Recommended Mitigation Measure 3: Fish Passage Design Coordination: Caltrans shall engage with CDFW in early and continued coordination before design commences as specified in Recommendation 6 Design Coordination with HabCon and Conservation Engineering from the COMMENT 1: Lake and Streambed Alteration Program Notification section of this comment letter.</p>	<p>would be conducted at that time, and Caltrans would submit the assessment results to CDFW and add it to the CALFISH database. If any fish passage barrier is identified during the assessment, remediation would be designed in consultation with CDFW. The Project would comply with Fish and Game Code section 5901 and would not install or maintain any device or structure that impedes the passing of fish up and down stream.</p>
<p>Ms. Erin Chappell, Regional Manager, California Department of Fish and Wildlife – Bay Delta Region</p>	<p>SA-1-7 COMMENT 7: Bat Assessment and Avoidance</p>	<p>Issue: Page 3-21 of the IS/ND indicates multiple locations have the potential to support bats or contain roosting trees or potential roosting structures and facilities. Multiple bat species are identified within the Project limits as having suitable habitat including, but not limited to; Big Brown Bat (BIOS; DS-1828); Brazilian Free-Tailed Bat (BIOS; DS- 2498); Townsends Big-Eared Bat (BIOS; DS-2496) and the Hoary Bat (BIOS; DS- 2493). The IS/ND does not identify the extent to which impacts may occur to bats or their habitat from modification of existing structures or the removal of trees, this could result in substantial adverse effect on sensitive species and riparian habitat.</p> <p>Recommendation: Modify measures AMM-BIO-16 and AMM-BIO-17 of the IS/ND to the following:</p> <p>Recommended Mitigation Measure 1 Bat Habitat Assessment: A qualified biologist should conduct a habitat assessment within the Project limits for suitable bat roosting habitat. The habitat assessment shall include a visual inspection of features within 200 feet of the work area for potential roosting features including trees, crevices, portholes, expansion joints and hollow areas (bats need not be present). A report should be provided by the qualified biologist and incorporated into the subsequent</p>	<p>Bat habitat assessments were conducted on May 5 and 6, 2022 to examine potential roosting and foraging locations for special-status bats, including pallid bat, western red bat, and Townsend’s big-eared bat, within the BSA. No day-roosting bats were observed at any location and/or adjacent vegetation during the survey. In addition, no sign of night-roosting bats (such as guano or urine staining) was observed below any potentially suitable tree roost habitat that could be safely accessed on foot and within the BSA.</p> <p>There are no CNDDDB occurrences of pallid bat or western red bat and three CNDDDB occurrences of Townsend’s big-eared bat within 2 miles of the BSA. Although conditions within the BSA are generally unsuitable or provide only marginally suitable habitat for special-status bat species, there is some potential for individuals to roost adjacent to the Project footprint, possibly originating from more suitable roost sites in nearby areas, within suitable roosting trees. However, where trees are adjacent to shoulder widening, avoidance and/or minimization measures would be evaluated in PS&E and implemented in construction to avoid the potential for any tree removal. Additionally,</p>

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		<p>draft IS/ND that includes a section discussing the locations of suitable bat habitat and if any bats or signs of bats (feces or staining at entry/exit points) are discovered. The surveys should occur at least two seasons in advance of Project initiation.</p> <p>Recommended Mitigation Measure 2 Bat Habitat Monitoring: If potentially suitable bat roosting habitat is determined to be present based on recommended mitigation measure 1 above, a qualified biologist shall conduct focused surveys at the trees, bridge(s), culverts and overpasses. Methods should include utilizing night-exit surveys, sound analyzation equipment and visual inspection within open expansion joints and portholes of the structures. Surveys should occur from March 1 to April 15 or August 31 to October 15 prior to construction activities. If the focused survey reveals the presence of roosting bats, then the appropriate exclusionary or avoidance measures will be implemented prior to construction during the period between March 1 to April 15 or August 31 to October 15. Potential avoidance methods may include temporary, exclusionary blocking, one-way-doors or filling potential cavities with foam. Methods may also include visual monitoring and staging of work at different ends of the Project to avoid work during critical periods of the bat life cycle or to allow roosting habitat to persist undisturbed throughout the course of construction. Exclusion netting or adhesive roll material shall not be used as exclusion methods. If presence/absence surveys indicate bat occupancy, then construction should be limited to avoid the most sensitive stages of the bat species life cycle (maternity/pupping season).</p> <p>Recommended Mitigation Measure 3 Bat Project Avoidance: If active bat roosts are observed during environmental assessments or during construction, at any time, all Project activities should stop until the qualified biologist develops a bat avoidance plan to be implemented at the Project site. Once the plan is implemented, Project activities may recommence in coordination with the natural resource agencies. The bat avoidance plan should utilize seasonal avoidance, phased construction, as well as, temporary and permanent bat housing structures developed in coordination with CDFW.</p> <p>Recommended Mitigation Measure 4 Permanent Bat Roost Design: Permanent bat roost structures shall be incorporated into the design of modified structures and on trees within the Project to avoid potentially significant impacts from permanent habitat loss to roosting bats. The structures should be designed in coordination with CDFW and include the appropriate baffle spacing or features to accommodate multiple species of bats as specified in the Caltrans Bat Mitigation: A Guide to Developing Feasible and Effective Solutions Manual (H.T. Harvey, 2019).</p>	<p>there would be no Project impacts to abandoned structures or bridges that could provide bat roosting habitat. Therefore, impacts to bats would be less than significant, and implementation of PF-BIO-3, PF-BIO-4, PF-BIO-7, PF-BIO-8, PF-BIO-10, AMM-BIO-1, AMM-BIO-3, AMM-BIO-14, AMM-BIO-15, and AMM-BIO-18 would further avoid and/or minimize potential impacts to bats.</p>
<p>Ms. Erin Chappell, Regional Manager, California Department of Fish and Wildlife – Bay Delta Region</p>	<p>SA-1-8 COMMENT 8: Light Impact Analysis and Discussion</p>	<p>Issue: Page 3-7 of the IS/NMD indicates temporary construction lights will be employed throughout the Project but the IS/ND does not disclose if any new permanent lights or replacement of previously existing light elements with new lighting technology will occur as a result of construction. Please indicate if new permanent light or replacement light elements are proposed. This could result in substantial adverse effect on sensitive species and riparian habitat.</p> <p>Evidence the impact would be significant: Artificial night lighting can disrupt the circadian rhythms of many wildlife species. Many species use photoperiod cues for communication (e.g., bird song; Miller, 2006), determining when to begin foraging (Stone et al., 2009), behavior thermoregulation (Beiswenger, 1977), and migration (Longcore and Rich, 2004). For nocturnally migrating birds, direct mortality as a result of collisions with anthropogenic structures due to attraction to light (Gauthreux, 2006) is another direct effect of artificial light pollution. There are also more subtle effects, such as disrupted orientation (Poot et al., 2008) and changes in habitat selection (McLaren et al., 2018). Frogs and salamanders are particularly susceptible to artificial light pollution. Light pollution may affect physiology, behavior, ecology, and evolution of frog and salamander populations (Wise, 2007). For example, artificial light levels and timing influences melatonin production in salamanders. Melatonin regulates hormones, reproductive development and behavior, skin coloration, an animal's ability to regulate body temperature, and night vision (Gern, 1986). Reduced survival at the population level can result in smaller populations or populations that disappear altogether. Due to the high potential for migratory birds, songbirds, amphibians and mammals, including nocturnally active state listed and special-status species such as California tiger salamander and American badger, to occur within the Project limits, CDFW recommends no lighting is installed as a result of Project completion to avoid these potentially significant impacts.</p>	<p>This Project will not install any new permanent light or replacement light elements and therefore no potential impacts (significant or otherwise) to sensitive species or riparian habitat from new artificial light sources would occur.</p> <p>Nightwork is not anticipated for this Project, therefore, construction lighting is not anticipated to be needed during construction. However, in the event that temporary construction lighting is required, temporary construction lighting would be limited to occurring within the Project footprint for construction-related activities, and lighting would be minimized with the use of directional lighting, shielding, the use of bulbs that emit light at or under 2700 kelvin, and other measures as needed to avoid exposing nocturnal wildlife and their habitats, adjacent residences, and the traveling public to excessive glare and impacts would be less than significant.</p>

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		<p>Recommendation: If new or replacement lighting elements are proposed, CDFW strongly recommends that the Project does not propose to install new artificial light sources, especially in areas where no artificial light previously existed. In areas where new or replacement artificial light sources are installed CDFW recommends incorporation of the following:</p> <p>Recommended Mitigation Measure 1 Light Output Analysis: The Lead Agency should submit as part of the IS/ND Isolux Diagrams that note current light levels present during Pre-Project conditions and the predicted light levels that will be created upon completion of the Project. If an increase in light output from current levels to the projected future levels is evident, additional avoidance, minimization or mitigation shall be developed in coordination with the natural resource agencies to offset indirect impacts to fish and wildlife species. Within 60 days of Project completion the Lead Agency shall conduct a ground survey that compares projected future light levels with actual light levels achieved upon completion of the Project through comparison of Isolux diagrams. If an increase from the projected levels to the actual levels is discovered additional avoidance, minimization or mitigation measures may also be required in coordination with the natural resource agencies. This analysis should be conducted across all potential alternatives and compared in table and map format.</p> <p>Recommended Mitigation Measure 2 Light Output Limits: All LED's or bulbs installed as a result of the Project shall be rated to emit or produce light at or under 2700 kelvin that results in the output of a warm white color spectrum.</p> <p>Recommended Mitigation Measure 3 Vehicle Light Barriers: Solid barriers at a minimum height of 3.5 feet should be installed in areas where they have the potential to reduce illumination from overhead lights and from vehicle lights into areas outside of the roadway. Barriers should only be utilized as a light pollution minimization measure if they do not create a significant barrier to wildlife movement. Additional barrier types should be employed when feasible, such as privacy slats into the spacing of cyclone fencing to create light barriers for areas outside the roadway.</p> <p>Recommended Mitigation Measure 4 Reflective Signs and Road Striping: Retro-reflectivity of signs and road striping should be implemented throughout the Project to reduce the need for electrical lighting.</p> <p>Recommended Mitigation Measure 5 Light Pole Modifications and Shielding: All light poles or sources of illumination that will be new or replacement installations of existing light sources should be installed with the appropriate shielding to avoid excessive light pollution into natural landscapes or aquatic habitat within the Project corridor in coordination with CDFW. In addition, the light pole arm length and mast heights should be modified to site-specific conditions to reduce excessive light spillage into natural landscapes or aquatic habitat within the Project corridor. In areas with sensitive natural landscapes or aquatic habitat, the Lead Agency should also analyze and determine if placing the light poles at non-standard intervals has the potential to further reduce excessive light pollution by decreasing the number of light output sources in sensitive areas.</p>	
<p>Ms. Eris Weaver, Executive Director, Sonoma County Bicycle Coalition</p>	<p>NPO-1-1</p>	<p>Thanks for meeting with me yesterday regarding the Highway 1 Rumble Strip project. I still couldn't find the report on the Caltrans website so I dug out the <i>Press Democrat</i> public notices section to get the direct URL and download the report. I have a few questions.</p> <p>Regarding the purpose of the project (p. 1.1):</p> <p><i>The purpose of the Project is to reduce the number and severity of head-on, cross-centerline, and run-off-road collisions in order to provide safe traffic operations on SR 1 and also to provide refuge areas for bicyclists to use when being passed by motorists on this stretch of the highway.</i></p> <p><i>The current Two-and-Three-Lane Safety Monitoring Program has identified several head-on collisions, sideswipe collisions, and fatal collisions on SR 1 in Sonoma County. The 2012 California Roadway Departure Safety Implementation Plan (CA-RDSIP) (FHWA 2012) also identified SR 1 in Sonoma County as having fatalities from run-off-road accidents that meet the threshold for countermeasures. CA-RDSIP promotes the implementation of centerline rumble strips on two-lane undivided rural highways with a pavement width of at least 20 feet when thresholds have been met.</i></p> <p>How many collisions? Where? I don't know anything about the Two-and-Three-Lane Safety Monitoring Program (and couldn't find it online) but I did search the Statewide Integrated Traffic Records System (SWITRS). There were 169 crashes on Highway 1 in Sonoma County in 2017-2021 (see chart below).</p>	<p>The Two- and Three-Lane Cross Centerline Collision Monitoring Program is a Caltrans Safety Program which identifies segments of the State Highway System with high concentration of fatal cross centerline collisions for further investigation. Based on the investigative findings, safety enhancement projects are developed to implement appropriate countermeasures. The Centerline Rumble Strip Project along SR 1 in Sonoma County was developed in response to the findings from this monitoring Program, in order to implement countermeasures, thereby improving safe traffic operations on SR 1.</p>

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		<p>Forty-eight percent were caused by improper turning and 20 percent by excessive speed. It is not clear to me how the installation of rumble strips would decrease these sorts of crashes.</p> <p>Number of Crashes by PCF Violation</p> <table border="1"> <caption>Number of Crashes by PCF Violation</caption> <thead> <tr> <th>PCF Violation</th> <th>Count</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>01 - Driving or Bicycling Under the Influence of Alcohol or Drug</td> <td>1</td> <td>0.59%</td> </tr> <tr> <td>03 - Unsafe Speed</td> <td>34</td> <td>20.12%</td> </tr> <tr> <td>05 - Wrong Side of Road</td> <td>19</td> <td>11.24%</td> </tr> <tr> <td>06 - Improper Passing</td> <td>2</td> <td>1.18%</td> </tr> <tr> <td>08 - Improper Turning</td> <td>81</td> <td>47.93%</td> </tr> <tr> <td>09 - Automobile Right of Way</td> <td>16</td> <td>9.47%</td> </tr> <tr> <td>12 - Traffic Signals and Signs</td> <td>12</td> <td>7.10%</td> </tr> <tr> <td>18 - Other Than Driver (or Pedestrian)</td> <td>3</td> <td>1.78%</td> </tr> <tr> <td>?? - Other Improper Driving</td> <td>2</td> <td>1.18%</td> </tr> </tbody> </table> <p>PCF Violation</p> <ul style="list-style-type: none"> 01 - Driving or Bicycling Under the Influence of Alcohol or Drug 03 - Unsafe Speed 05 - Wrong Side of Road 06 - Improper Passing 08 - Improper Turning 09 - Automobile Right of Way 12 - Traffic Signals and Signs 18 - Other Than Driver (or Pedestrian) ?? - Other Improper Driving 	PCF Violation	Count	Percentage	01 - Driving or Bicycling Under the Influence of Alcohol or Drug	1	0.59%	03 - Unsafe Speed	34	20.12%	05 - Wrong Side of Road	19	11.24%	06 - Improper Passing	2	1.18%	08 - Improper Turning	81	47.93%	09 - Automobile Right of Way	16	9.47%	12 - Traffic Signals and Signs	12	7.10%	18 - Other Than Driver (or Pedestrian)	3	1.78%	?? - Other Improper Driving	2	1.18%	
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<p>Ms. Eris Weaver, Executive Director, Sonoma County Bicycle Coalition</p>	<p>NPO-1-2</p>	<p>During our conversation you mentioned a similar project in Marin County, and the report states (p. 2.3):</p> <p><i>To ensure the Project supports safe mobility for all users, a previous Caltrans centerline rumble strip project was analyzed. Centerline rumble strips were installed on SR 1 in Marin County, and collision data from before and after Project completion was analyzed. In conclusion, after the installation of centerline rumble strips, the percentage of bicycle-related collisions, head-on, and fatal collisions, have all decreased. Therefore, centerline rumble strip has been proven to increase the overall, multi-modal safety for all users.</i></p> <p>Again, what is the source of the data? I'd like to see the actual numbers. Did that project also widen the shoulder?</p>	<p>In addition to installing centerline rumble strip, the Marin County centerline rumble strip project also included other safety enhancement features including shoulder widening at selected locations and installing road striping & markings with enhanced nighttime visibility. These safety countermeasures improved traffic safety for all road users traveling on SR1 in Marin County. The scope of this Project includes the same countermeasures to reduce the number and severity of head-on, cross-centerline, and run-off-road collisions in order to provide safe traffic operations on SR 1 in Sonoma County for all users.</p> <p>Caltrans continually tracks the safety performance of the State Highway System through multiple safety tracking tools including the Two- and Three-Lane Cross Centerline Collision Monitoring Program, the Bicyclist Safety Improvement Monitoring Program and Run Off Road Monitoring Program. When appropriate, additional safety enhancement projects will be developed to address identified issues and to ensure safe travel for all road users.</p> <p>The Bicyclist Safety Improvement Monitoring Program identifies locations that have experienced high concentration of bicyclist-involved collisions. This is a reactive approach to address the so-called hot spot locations.</p> <p>The Bicyclists Systemic Safety Improvement Program looks for locations that may not have experienced any collisions but share similar characteristics or risks that are associated with locations that have experienced bicyclist-involved collisions. This is the proactive approach to enhance safety without waiting for collisions to occur.</p> <p>Both programs are based on data-driven safety analyses with the goal of reducing bicyclist fatalities and serious injuries.</p> <p>Caltrans is responsible for maintaining the State Highway System, and prioritizes safety for all users with a goal of zero deaths. The Caltrans Traffic Safety Investigation Branches are responsible for investigating locations identified by these programs and recommending projects to improve safety. The results of the safety monitoring programs are not public documents.</p>																														

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Ms. Eris Weaver, Executive Director, Sonoma County Bicycle Coalition	NPO-1-3	I already mentioned the inadequacy of the project's public outreach (one public notice in the section of the newspaper that nobody reads). In that notice, as well as on p. 4.1 of the report, are listed three libraries where a hard copy of the report resides: Guerneville, Rohnert Park/Cotati, and Sonoma. Guerneville makes sense as it is the closest to at least some sections of the coast; Rohnert Park is a little odd but Sonoma? Did anyone look at a map of the county? The town of Sonoma is the farthest away from the coast. Did you mean the Central Branch of the Sonoma County Library, which is in Santa Rosa?	Caltrans acknowledges your comments regarding the public outreach conducted for this Project. Per CEQA guidelines, Caltrans is committed to project specific equitable public engagement. In addition to the Public Notice in the Press Democrat, Caltrans evaluated the Project corridor and selected relevant locations for distribution of hard copies of the DED. Furthermore, flyers were sent via USPS to residents along the entire Project corridor. These flyers provided information about the Project, the public comment period, as well as the Caltrans District 4 website where the IS/ND can be found. Additionally, the Project was presented at the Sonoma County Coastal Municipal Advisory Council meeting on January 19, 2023, and at the Sonoma County Bicycle Coalition meeting on January 24, 2023.
Ms. Eris Weaver, Executive Director, Sonoma County Bicycle Coalition	NPO-1-4	I am going to engage in further research and will likely have additional comments, but at this point I have not been convinced that adding rumble strips to this stretch of highway is going to result in the greatest increase in safety for cyclists. (If you have better data on this please point me to it.) For an expenditure of \$23 million I'd rather see the shoulders widened and a dedicated bikeway installed along the entire corridor, reduced speed limits, and the installation of the "Bikes May Take Entire Lane" signs we discussed.	<p>Caltrans acknowledges your comments regarding the safety of cyclists on SR 1 within the Project corridor. The purpose of the centerline rumble strips are to decrease the number and severity of head-on, cross-centerline, and run-off-road collisions in order to improve safe traffic operations on SR 1. Additionally, following the installation of centerline rumble strip, and shoulder widening on SR 1 in Marin County, post-construction collision data has been assessed, and has shown that after the installation of centerline rumble strip, the percentage of bicycle-related collisions with vehicle-bike conflict has decreased. With the installation of centerline rumble strip in addition to the construction of bicycle refuge areas, it is anticipated that there will be an increase in safety for cyclists on SR 1 within the Project corridor.</p> <p>While Caltrans agrees that it would be ideal to widen the shoulders for a dedicated bikeway along the entire corridor, and sign and stripe the shoulders as bike lanes, the existing Build Alternative for this Project would not extend the widened shoulders to an intersection and thus any designated bike lane would not connect to any cross streets. However, the Caltrans Office of Traffic Safety will consider bicycle-related signage in those areas where the shoulder tapers and narrows again where bicyclists may be re-entering the travel lane from the widened shoulder. This evaluation of bicycle-related signage has been added to the Final IS/ND as an avoidance and/or minimization measure to the Transportation section as AMM-TRANS-2.</p>
Ms. Eris Weaver, Executive Director, Sonoma County Bicycle Coalition	NPO-1-5	Finally, please do not repeat the line about "Caltrans is dedicated to complete streets/accessibility & safety for all users" immediately followed by a list of the reasons that whatever infrastructure change bike & pedestrian advocates are asking for "isn't feasible." I hear a version of this from every level of government and while it is likely intended to be reassuring, it is actually somewhat insulting. I will believe it when I see projects that put pedestrians and cyclists FIRST rather than treating us as an "add on" to roads that are designed primarily for autos.	Caltrans acknowledges your comment regarding the validity of the statement "Caltrans is dedicated to complete streets/accessibility and safety for all users". This Project proposes to install 50 bicycle refuge areas throughout the Project corridor, improving existing facilities for all users. While Caltrans understands that it would be ideal for this Project to widen the shoulders along the entire corridor to construct a continuous bike path, that is not within the scope of this Project.
Ms. Emily Shartin, Advocacy and Communications Coordinator, Sonoma County Bicycle Coalition	NPO-2-1	<p>While we appreciate the effort to increase safety on Highway 1, this project seems to be considering bicyclists as an afterthought. We are concerned that a centerline rumble strip will deter cars from giving bicyclists a wide enough berth when passing. Given that many stretches of Highway 1 in Sonoma County have little or no shoulder, cars often need to cross the centerline to give bicycles a safe distance. With the impediment of a rumble strip, cars conceivably would be passing much closer to bicyclists than they are currently.</p> <p>We recognize that Caltrans is aiming to address concerns around safe passage by widening the shoulder at 50 locations along the road. But the lack of a continuous shoulder puts the burden on bicyclists both to get out of the way of traffic and then move back into the travel lane when the shoulder disappears -- a situation that ultimately favors cars. If the project continues as proposed, visibility for bicyclists returning to the travel lane must be of paramount consideration when widening the shoulder.</p> <p>We repeat our request for more transparency around the accident data that led to this project, as well as details regarding a similar, completed project on Highway 1 in Marin County and the effects it has had in reducing collisions there.</p> <p>In a brief presentation to Sonoma's Countywide Bicycle and Pedestrian Advisory Committee in January, representatives from Caltrans acknowledged that the Sonoma County project does not "create the ideal bikeway" on Highway 1. A <i>continuous</i>, 6-foot-wide shoulder on Highway 1, however, would be a major step toward an ideal bikeway. We encourage Caltrans to put the \$23 million allotted</p>	<p>Caltrans acknowledges your comment regarding the centerline rumble strip potentially discouraging motorists to provide bicyclists with enough room when passing, however collision data was collected from State Route 1 in Marin County, after a similar Project was implemented which showed that the percentage of bicycle-related collisions with vehicle-bike conflict has decreased since the rumble strips were installed on State Route 1 in Marin County.</p> <p>While Caltrans understands that it would be ideal to widen the shoulders for a dedicated bikeway along the entire corridor, and sign and stripe the shoulders as bike lanes, the existing Build Alternative for this Project would not extend the widened shoulders to an intersection and thus any designated bike lane would not connect to any cross streets. However, the Caltrans Office of Traffic Safety will consider bicycle-related signage in those areas where the shoulder tapers and narrows again where bicyclists may be re-entering the lane from the widened shoulder. This evaluation of bicycle-related signage has been added to the Final IS/ND as an avoidance and/or minimization measure to the Transportation section as AMM-TRANS-2.</p> <p>The scope of this Project does not include a continuous, 6-foot-wide shoulder on Highway 1 within the Project corridor. However, Caltrans will continue to coordinate with parent agencies on implementing bicycle improvements to the State Highway System.</p>

Commenter	Comment Number	Comment	Response
		for this project toward ensuring that a viable shoulder extends the length of Highway 1 in Sonoma County to increase safety for bicycles and cars alike.	
Mr. Kenneth Tam, Park Planner II, Sonoma County Regional Parks	NPO-3-1	<p>Thank you for the opportunity to comment on the State Route 1 Centerline Rumble Strip Project. It is our understanding that the proposed project would include the installation of a centerline rumble strip and shoulder pavement widening to 6-feet at 50 spot locations which are identified in Tables 2-2 and 2-3. These improvements would improve the safety of motorists and bicyclists using State Route 1 to access many of the public parks and beaches on the coast. Widening the road pavement shoulders will also improve access for pedestrians. Sonoma County Regional Parks supports Caltrans efforts in making State Route 1 safer for motorists and bicyclists.</p> <p>Regional Parks is working on the development of several sections of the California Coastal Trail which will also provide a safe pathway for bicyclists and pedestrians along the State Route 1 corridor. The specific Coastal Trail sections are identified in the subsequent paragraphs.</p> <p><u>Timber Cove Trail (PM 34.63 to PM 38.16)</u></p> <p>In 2015, Regional Parks completed the Timber Cove Trail Feasibility Study which evaluated a 2.5-mile-long preferred trail (aka Coastal Trail) alignment from Stillwater Cove Regional Park on the north end to Fort Ross State Historic Park on the southern end (PM 34.63 to PM 38.16). Parts of the preferred trail alignment would be located within the State right of way.</p> <p>Per Table 2-3. Shoulder Widening Locations (ISND), no shoulder widening is proposed from PM 34.63 to PM 38.16 where a section of the proposed Coastal Trail would be located. If the shoulder widening limits are expanded at a later date to include PM 34.63 to PM 38.16, please contact and coordinate with Regional Parks. There may be opportunities where the shoulder widening could help improve sections of the Coastal Trail. Attached for reference are typical trail cross sections showing how bicycle and pedestrian use can be accommodated within the State Route 1 corridor. The trail cross sections were taken from the Timber Cove Trail Feasibility Study.</p> <p><u>Stewarts Point Ranch Trail (PM 48.74 to PM 48.20)</u></p> <p>In March 2022, Regional Parks complete the Initial Study and Mitigated Negative Declaration for the North Coast Trails Project (aka Stewarts Point Ranch Trail and Kashia Coastal Reserve Trail). This section of the Coastal Trail is located off the highway on the west side of State Route 1. The trail connects to the highway at PM 48.74 and PM 48.20. Per Table 2-3. Shoulder Widening Locations (ISND), no shoulder widening is proposed from PM 48.74 to PM 48.20, please contact and coordinate with Regional Parks.</p> <p><u>Kashia Coastal Reserve Trail (PM 44.72 to PM 45.87)</u></p> <p>This section of the Coastal Trail is on the west side of State Route 1. There are seven (7) general locations where the proposed trail alignments are located near or within the State Route 1. The seven locations are identified at PM 44.72, 44.82 (drainage), 44.97 (drainage), 45.32 (drainage), 45.43 (drainage), 45.68 (drainage), and 45.87. It appears that the proposed shoulder pavement widening at SB#38 (Location 54) is in proximity to PM 45.32.</p> <p>Regional Parks is planning to advertise for construction bids for the North Coast Trails project in winter 2023 and completing trail construction in 2025. It is our understanding that Caltrans plans to start construction of the centerline rumble strip and shoulder pavement widening in January 2025. As Caltrans gets closer to finalizing the project schedule, please contact Regional Parks so that we can 1) review and provide input on the Caltrans improvement plans and 2) coordinate our construction activities.</p>	<p>Thank you for your comment. Caltrans will contact and coordinate with Sonoma County Regional Parks if a shoulder widening location is added between PM 34.16 and PM 38.16 and/or between PM 48.74 and PM 48.20. In addition, Caltrans will contact Sonoma County Regional Parks as construction of this Project approaches, to ensure Sonoma County Regional Parks can review and provide input on the Caltrans improvement plans during the design phase, and to ensure Sonoma County Regional Parks and Caltrans can coordinate construction activities if overlap exists between the Project and Sonoma County Regional Parks efforts related to the North Coast Trails Project. This coordination has been added to the Final IS/ND as an avoidance and/or minimization measure to the Transportation section as AMM-TRANS-1.</p>

Commenter	Comment Number	Comment	Response
Brandyn Simpson	IND-1-1	I received the notice today the 28 th of January. How many came to the meeting? I would think you might not be getting much controversy if this is any example of notice to the public. I think the bike riders should have separate paths for riding, the roads in this part of the County are too narrow for the bike riders. I'm surprised there are not more accidents.	Thank you for your comments. While Caltrans understands the desire for separate bike paths in this part of Sonoma County the existing Build Alternative for this Project includes widening of the shoulder along SR 1 in Sonoma County at 50 locations and evaluating bicycle-related signage in those areas where the shoulder tapers and narrows again where bicyclists may be re-entering the lane from the widened shoulder during the Project design phase. This evaluation of bicycle-related signage has been added to the Final IS/ND as an avoidance and/or minimization measure to the Transportation section as AMM-TRANS-2. Caltrans is committed to looking for opportunities to improve the state highway system for all users by incorporating multi-modal improvements in all projects.
Claudia Collins	IND-2-1	My family has had a home on Hwy 1 for 50 years at Portuguese Beach. I understand that two turnouts are planned in the 20 mile span between Hwy 1 and Russian River. As early as 20 years ago, this probably would have been sufficient but not any longer. This stretch of the Sonoma Coast is very crowded now, at least on the weekends. There are many more mobile homes and many vehicles, and bicycles in general. The ocean side of the highway has very little room for error; we need many more turnouts in this area and they should be paved for safer travel. Impatient drivers will pass on a solid line if slower drivers don't have a chance to use available turnouts which has caused cars to go over the cliff as well as many fatalities. Please, please, include more turnouts on this very popular 20 mile stretch of Hwy 1.	Caltrans acknowledges your request for additional turnouts, however that type of work is not in the scope of this Project.
Steve Dee	IND -3-1	Thank you for the opportunity to review and comment on the proposed SR 1 Rumble Strip project. Although the proposed project would provide benefits to the motoring public, it at the same time may create potential impacts that neighboring land owners and cyclists have expressed concern over, namely noise and parking conflicts along SR 1. For example, the proposed 6-ft wide shoulder along SR 1 will create a parking supply for commercial and recreational land uses in Jenner thereby increasing traffic congestion and circulation conflicts, as well as conflicts with bicyclists that would otherwise use the new shoulders for a safe and efficient bike trail. Many conflicting land use activities already exist in Jenner so adding improvements such as the proposed project should be done with care. Adding noise generators (rumble strips) and a tacit parking supply along SR 1 by widening the shoulder width could create secondary impacts under the provisions of CEQA. Therefore, please respond to the following comments on the subject proposed Negative Declaration: 1-Identify and mitigate to a less-than-significant level the potential noise impacts on neighboring land uses that will be generated by the proposed rumble strips.	Caltrans acknowledge your comments regarding the anticipated noise generated from the proposed rumble strips. Caltrans has selected a specific type of rumble strip proposed under this Project called a mumble strip to address this concern. When a single vehicle passes by on the pavement at 60 miles per hour, the noise level is 81.5 dBA at 25 feet. When being crossed by a vehicle, mumble strips increase noise levels by 6 dBA above that of a single vehicle passing on the pavement, whereas rumble strips increase noise levels by 12.6 dBA when being crossed by a vehicle. As discussed in Section 2.2.1 of the IS/ND, the centerline rumble strips would be discontinued where the speed limit is equal to or less than 35 miles per hour; these locations include a minimum of 25 feet in advance of highway intersections, pedestrian crossings, cattle guards, commercial or town centers, and left-turn lane openings. Additionally, rumble strip strikes are intermittent and brief and will not increase the ambient noise levels, therefore this is a less than significant impact on noise.
Steve Dee	IND -3-2	2-Identify and mitigate to a less-than-significant level the potential conflict between parking supply created by the proposed shoulder widening and the need for an adequate and safe bicycle path.	The Caltrans Office of Traffic Safety will consider bicycle-related signage in those areas where the shoulder tapers and narrows again where bicyclists may be re-entering the lane from the widened shoulder. This evaluation of bicycle-related signage has been added to the Final IS/ND as an avoidance and/or minimization measure to the Transportation section as AMM-TRANS-2. Caltrans anticipates that the 6-feet of shoulder widening will deter people from using those areas as parking since they are not standard shoulder widths. Additionally, if bicycle refuge area signs are installed, it is anticipated that the signs would deter people from parking in the shoulder widening locations as well.
Pat Paterson	IND-4-1	Rumble strips should not be used in areas where the roadway frequently floods. Traffic must drive around the frequent flooding and ponding on the sides of highway 1. My wife had to detour on to State Route One in Marin County when Valley Ford Road flooded. It was dark and she did not realize there were newly installed rumble strips until she crossed the center line and was assaulted by the rumble strips. You should not put rumble strips where the roadway habitually floods or ponds for that reason. State Route 1 frequently floods in the S-curves just north of Valley Ford Road, mile post 1SON00.50 to 1SON01.00 and rumble strips should never be installed there.	Thank you for your comment. This Project does not propose to install rumble strips from PM 0.00 to PM 2.05.

Commenter	Comment Number	Comment	Response
Pat Paterson	IND-4-2	<p>When I attended the Sonoma County MAC meeting regarding the widening of SR 1's shoulders and brought up the subject of turnouts, I was told to email you.</p> <p>There are only 4 turnouts in the 20 miles between the Sonoma County Line the Russian River Bridge. They are too short for vehicles that are large enough to impede traffic to use. Some are poorly placed. When you widen the shoulders on State Route 1 please address the deficient turnouts. I am a retired highway patrolman that has worked/lived off SR 1 for 25 years. I collect antique trucks and have had a commercial license with endorsements.</p> <p>Valley Ford Turnout southbound 1SON02.20 which is just south of Valley Ford Freestone Road, is properly located in a flat straight away and even though it is parallel to the old highway it is too short. The old highway is so wide that Caltrans sometimes parks equipment on it. Usually, the traffic that use this turnout are lost motorist updating their navigation system (as seen on the current Google Street View).</p> <p>Bean Ave Turnout northbound 1SON12.40 which is at Bean Ave, is only about a half of a dozen car lengths long and on a sharp curve that limits view of approaching traffic. This turnout ends at the creek. The main use of this turnout is bird watching.</p> <p>Salmon Creek Beach Turnout 1SON12.70, is properly located in a very long straightaway however it still too short for descending heavy vehicles to normally use. It is also poorly marked. The "Turnout" sign shares a signpost with a tsunami evacuation route sign which is much larger and brighter than the turnout sign. The pavement is not marked with a red border, "Turnout" or "No Parking" so it fills up with parked cars during good weather. Only one No Parking sign is left. The other wooden No Parking signposts have been broken off.</p>	<p>While Caltrans understands that the existing turnout deficiencies along SR 1 in Sonoma County need to be addressed, that type of work is not in the scope of this Project. Caltrans will consider addressing the existing turnout deficiencies in a future project.</p> <p>The Caltrans Office of Traffic Safety will consider bicycle-related signage in areas where the shoulder tapers and narrows again where bicyclists may be re-entering the lane from the widened shoulder. Caltrans anticipates that the 6-feet of shoulder widening will deter people from using those areas as parking since they are not standard shoulder widths. Additionally, if bicycle refuge area signs are installed, it is anticipated that the signs would deter people from parking in the shoulder widening locations as well. This evaluation of bicycle-related signage has been added to the Final IS/ND as an avoidance and/or minimization measure to the Transportation section as AMM-TRANS-2.</p>
Les and Sheryl Erbst	IND-5-1	<p>I am writing in protest of the planned State Rt. 1 Centerline Rumble Strip Project. I received the small post card notice on January 28, 2023, so I was not aware and able to attend the zoom meeting held on January 19.</p> <p>I reviewed the proposal and found that one of the spot locations is directly in front of my house apparently the only such situation in the entire length of the project. That would be SB#2 Location 6 and my address is 14655 Hwy 1 Valley Ford. My house sits less than 100 feet from the road and the addition of rumble strip would have devastating effects on our quality of life. There is also less than 25 feet from the highway to the easement road in front of my house and losing an additional 6 feet for a bicycle lane would create an even smaller and unsafe buffer between the highway and easement road.</p> <p>The loud noise from the rumble strip would be heard and felt inside our house ruining our quality of life and potentially decreasing our property value and desirability of our property. It would disturb and potentially frighten our pets and livestock. We would be unable to sleep or eat in peace and could have a negative impact on our mental and physical health.</p> <p>Obviously this was not taken into consideration by Caltrans when doing your impact study so I would ask that this spot location be removed and that the rumble strip not be installed in front of our home. There is no need for it as the piece of road sits between two sharp bends in the highway that requires traffic to go slowly. In my 27 years here there has never been an accident caused by anyone crossing the center line.</p> <p>Please contact me asap to discuss and resolve this matter.</p>	<p>Caltrans acknowledges your comment regarding the anticipated noise generated from the proposed rumble strips. Caltrans has selected a specific type of rumble strip proposed under this Project called a mumble strip to address this concern. When being crossed by a vehicle, mumble strips increase noise levels by 6 dBA above that of a single vehicle passing on the pavement, whereas rumble strips increase noise levels by 12.6 dBA. Rumble strip strikes are intermittent and brief and would not increase the ambient noise levels. The shoulder widening is consistent with the Caltrans Complete Streets Action Plan, Caltrans State Route 1 Transportation Concept Report, and Sonoma County Transportation Authority Countywide Bicycle and Pedestrian Master Plan.</p>

Notes:
IND = Individual
NPO = Non-Profit Organization
SA = State Agency