State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Director's Office
1416 Ninth Street, 12th Floor
Sacramento, CA 95814
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

Via Email and First Class Mail

October 5, 2016

Brian Annis, Undersecretary
California State Transportation Agency
1120 N Street
Sacramento, CA 95814

Dear ~~Mr. Annis:~~ BRian

Subj: Early Mitigation for Wildlife Crossing Over Highway 17 at Laurel Curve

The purpose of this letter is to advance a pilot project that implements the Governor's recently signed AB 2087 advance mitigation legislation. In keeping with our mutual interests in safe travel and safe passage for fish and wildlife, California Department of Fish and Wildlife (CDFW) is interested in working with the California Department of Transportation ("Caltrans") to ensure a functional network of connected wildlands as essential to the continued support of California's diverse natural communities by supporting the incorporation of wildlife connectivity features into the design of transportation projects. Most recently, both Caltrans and CDFW have been collaborating to identify ways to achieve connectivity for a specific area along Highway 17 called Laurel Curve.

At the same time, Caltrans and CDFW have been cooperating on a new approach to providing advance mitigation more broadly through Regional Conservation Investment Strategies (RCIS). Identifying the best conservation opportunities and creating a crediting system through which Caltrans could invest in conservation opportunities before project impacts is a positive step towards streamlining the mitigation delivery process and achieving better conservation outcomes. This approach was recently codified in law which opened the door for CDFW to consider advance mitigation approaches for a variety of fish, wildlife, and habitat values.

CDFW is interested in collaborating with Caltrans to develop a mutually agreeable long-term program that provides advance mitigation credits for addressing wildlife connectivity and related issues. We hope that the Highway 17 Laurel Curve wildlife crossing project may be used as a pilot effort that can be transitioned into a statewide program. This would provide us with an advance mitigation tool that addresses important wildlife connectivity issues throughout the State and streamline future transportation projects via the use of advance mitigation credits.

In particular, we are interested in reaching agreement with Caltrans on a crediting system that has a basis in, and directly addresses, wildlife connectivity impacts from road projects. While we are open to working with Caltrans to achieve that objective, a system that is based entirely on project costs as the mitigation metric would not meet the fundamental purpose of parity between impacts and mitigation.

This letter provides assurance to the California State Transportation Agency ("CalSTA") that, to the maximum extent permissible by law, CDFW will recognize the Wildlife Crossing (Laurel Curve on Highway 17 in Santa Cruz County as described to CDFW by Caltrans) as suitable mitigation to offset fish, wildlife, and habitat resource impacts under the California Environmental Quality Act ("CEQA", Public Resources Code section 21000 et seq.) for future transportation projects, as described herein.

Need for Wildlife Crossing at Laurel Curve

In February 2010, CDFW and Caltrans developed the California Essential Habitat Connectivity Project to improve the efficiency of transportation and land-use planning, to reduce risks associated with wildlife-vehicle collisions by identifying and characterizing areas essential for connectivity between natural habitat blocks, and to provide guidance for mitigating the fragmenting effects of roads through the development of connectivity plans. The California Essential Habitat Connectivity Project recognized Laurel Curve on Highway 17 in Santa Cruz County (depicted in Attachment A) as a part of an essential connectivity area in the Santa Cruz Mountains. The Wildlife Crossing presents a unique opportunity to secure safe passage for wildlife across Highway 17 to help address needs identified by the California Essential Habitat Connectivity Project.

Highway 17 is a four-lane conventional highway that bisects the Santa Cruz Mountains between the City of Santa Cruz in Santa Cruz County and the City of Los Gatos in Santa Clara County. High-volume traffic (approximately 57,000 vehicles per day), concrete median barriers, and a lack of adequate culvert or bridge crossings create a significant obstacle to regional wildlife connectivity.

GPS telemetry data collected by the UC Santa Cruz Puma Project indicates that Laurel Curve is an area where several mountain lions have crossed, or attempted to cross, Highway 17. Caltrans District 5 animal-vehicle collision data and wildlife camera footage collected by Pathways for Wildlife also demonstrate that Laurel Curve is an important location for wildlife crossing.

Wildlife Crossing Proposal

The proposal for the Wildlife Crossing is a collaborative project between the Land Trust of Santa Cruz County, Midpeninsula Regional Open Space District, Peninsula Open Space Trust, Pathways for Wildlife, and Caltrans. The Land Trust of Santa Cruz County has purchased 290 acres on either side of Laurel Curve, ensuring permanent protection of adjacent habitats. Caltrans District 5 has identified two preliminary engineering

design options for wildlife crossings at the subject location:

- A single concrete box culvert, 125 feet long, 16 feet wide and 12 feet high, backfilled with native soil for a natural bottom; and
- A span roadway "bridge", which would replace sections of the existing roadway to provide an open space below. This design would involve excavation of a 60-foot-long, 16-foot by 12-foot cavity with sloping sides, providing a more open undercrossing than the box culvert option.

CDFW's determination of CEQA mitigation credits, described below, is the same for both design options. The credits have also been weighted to account for habitat acquisition and preservation.

Determination of CEQA Credits

CDFW has determined that the proposed Wildlife Crossing has high value to wildlife after evaluating it based on the following criteria:

- Number of species expected to benefit from the Wildlife Crossing, and the extent of the benefits, and whether any of those species are special status species, including endangered, rare, or threatened species, under the CEQA Guidelines, California Code of Regulations, title 14, section 15380;
- Demonstrated need for a crossing at this location through a wildlife movement study or other analysis provided;
- The acreage of undeveloped and protected natural habitats connected by the crossing;
- Suitability of the crossing design for species likely to cross at this location;
- Conditions at the crossing location that would impede or enhance usage (noise, lighting, vegetation cover, topography, etc.);
- Proposed maintenance and monitoring of the crossing; and
- Consideration of existing permeability of the transportation system to wildlife movement.

After considering the above criteria, CDFW determined that the Wildlife Crossing is eligible for 70 credits for mitigation pursuant to CEQA. Appropriate application and use of these credits is discussed in the following section. CDFW is in the process of developing a more comprehensive, statewide connectivity crediting system which may differ from the initial prescriptions and approach described for the Wildlife Crossing. Consequently, the credits described here are unique to the Wildlife Crossing project.

Proposed Application of Wildlife Crossing Credits

CDFW supports use of the Wildlife Crossing credits calculated above as mitigation for future projects analyzed under CEQA. The credits may be used exclusively to offset impacts associated with Caltrans projects where Caltrans is the CEQA Lead Agency in Santa Cruz County, outside this area with prior approval from CDFW, or within a mutually agreed upon ecoregion or sub-ecoregion including:

- In-kind repair and rehabilitation of existing State Highway roads at sites with impaired wildlife crossing conditions without improvement of existing crossing impairments;
- Improvements of existing State Highway roads or local assistance projects that would decrease crossing permeability for wildlife (e.g., installation of guard rails or median barriers);
- Improvements to State Highway roads or local assistance projects that would increase traffic speeds or road capacity, resulting in greater danger to wildlife attempting to cross; and
- Out-of-kind impacts of less than one acre (as approved on a case-by-case basis by CDFW), such as permanent or temporary loss of roadside habitats during road construction.

Maintenance of the Wildlife Crossing would be determined and committed as part of project development as all features become known. Wildlife camera footage would be collected at the Wildlife Crossing to monitor its use and would be shared with CDFW annually for five years.

The Wildlife Crossing credits may be applied for CEQA mitigation as indicated in the below table. While this table does help quantify numbers of credits, mitigation and credits should be, and actually are more directly tied to impacts of the unique project and not project type.

PROPOSED APPLICATION OF WILDLIFE CROSSING CREDITS

Type of Impact	Estimated Number of Credits Required per Road Mile to Offset Impact
In-kind repair and replacement of existing barriers	10 credits per road mile
Improvements that would decrease permeability of existing roads	20 credits per road mile
Improvements that would increase speeds or capacity of existing roads	20 credits per road mile
Out-of-kind (impacts to habitat)	30 credits per acre
New highways or major transportation features	100 credits per road mile or as determined by CDFW

Limitations

This letter does not and should not be interpreted as pre-determining or otherwise defining the measures or actions that would be required to meet regulatory requirements associated with CEQA, and is not providing any authorization by CDFW for credits under the California Endangered Species Act, California Fish and Game Code Section 2080 et seq., or the California Fish and Game Code section 1600 et seq.

Unless authorized separately through a CESA Incidental Take Permit (ITP) pursuant to Fish and Game Code Section 2081(b) or a Streambed Alteration Agreement pursuant to Fish and Game Code Section 1600 et seq., by CDFW, the credits are not appropriate as mitigation for incidental take of state-listed species or for impacts to aquatic and riparian habitats or under other regulatory programs other than CEQA.

Credits will be available for use upon completion of the wildlife crossing project. Prior to their use, Caltrans shall request and receive a concurrence letter from CDFW authorizing the use of these credits on specific projects. The credits will apply as mitigation to address highway preservation and restoration projects as included within the State Highway Operations and Protection Program (SHOPP), new highways or other capacity increasing transportation features, when additional long-term funding is also provided and committed to keep the crossing in good working order for a minimum of 50 years.

For this project, the service area for future use of the credits is limited to County boundaries unless otherwise approved in advance by CDFW.

CDFW's determination of the Wildlife Crossing's suitability for compensatory mitigation values may not be treated as a final commitment until the completion of any required CEQA process (Notice of Determination filed), and any such determination may be subject to change, modification, or revocation in the event CDFW finds that that any of the following has occurred:

1. There has been a change in the fish, wildlife, or habitat values that was a basis for CDFW's determination.
2. The population, threat, or vulnerability status of the fish, wildlife, or habitat to be mitigated by the Wildlife Crossing has changed.
3. There are legal, practical or funding conditions associated with the Wildlife Crossing that could compromise the Wildlife Crossing's value as mitigation.

In closing, CDFW would welcome the implementation of the Wildlife Crossing as a means to foster ecological connectivity between existing habitat blocks and wildlands in Santa Cruz County in support of California's diverse natural communities, to reduce wildlife-vehicle collisions, and to improve the efficiency of Caltrans transportation planning by crediting the Wildlife Crossing for compensatory mitigation values under CEQA. Should you have any questions, please contact me at Kevin.Hunting@wildlife.ca.gov or by phone at (916) 653-1070.

Sincerely,

Kevin Hunting
Chief Deputy Director

Enclosure

ec: Scott Wilson, Regional Manager
California Department of Fish and Wildlife
Bay Delta Region (Region 3)
Scott.wilson@wildlife.ca.gov

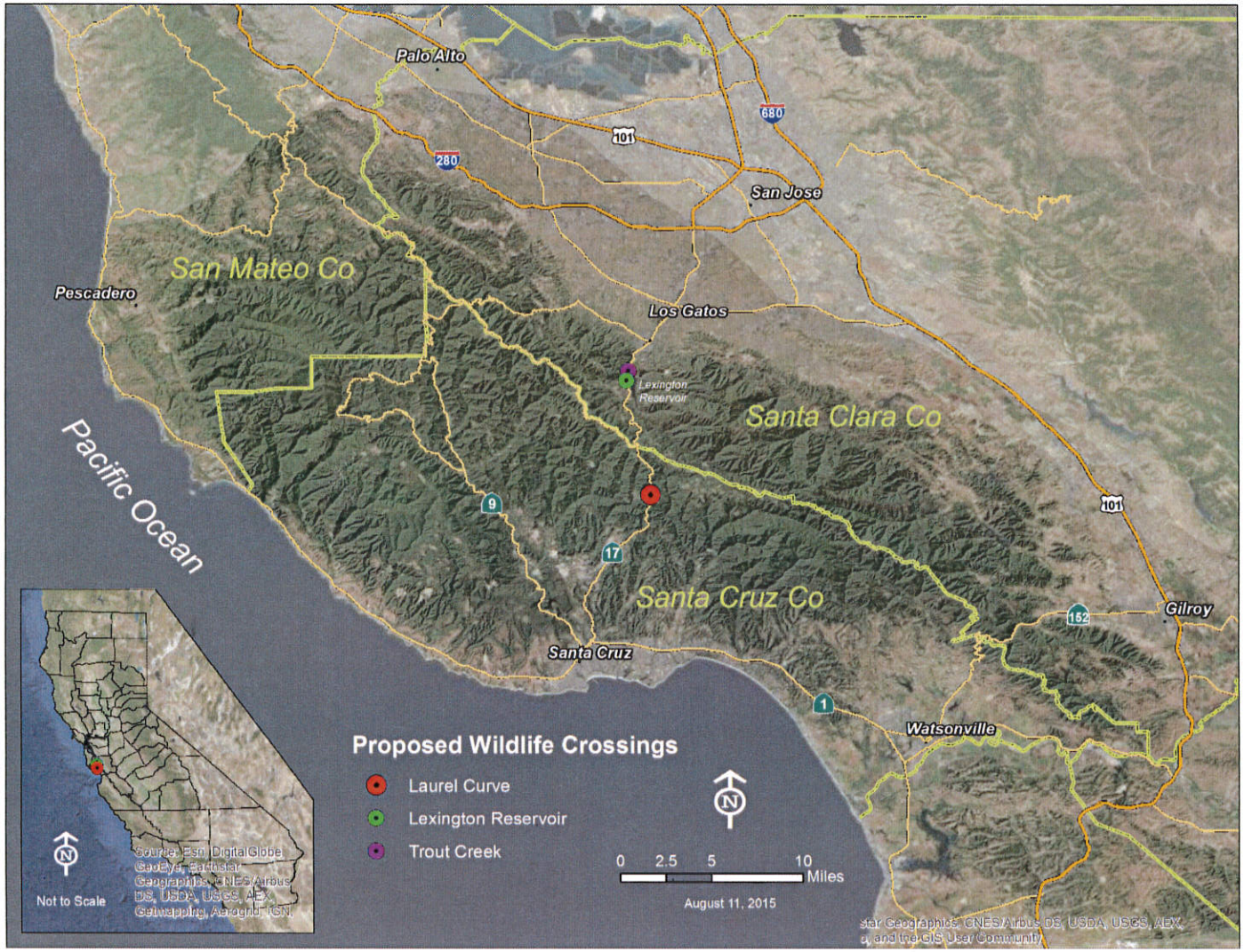
Richard Macedo, Branch Chief
California Department of Fish and Wildlife
Habitat Conservation Planning Branch
Richard.macedo@wildlife.ca.gov

Timothy Gubbins, District Director
California Department of Transportation
District 5
50 Higuera St, Ste 1150
San Luis Obispo, CA 93401

Richard Rosales, Supervising Engineer
California Department of Transportation
District 5
50 Higuera St, Ste 1150
San Luis Obispo, CA 93401

Aaron Henkel, Project Manager
California Department of Transportation
District 5
50 Higuera St, Ste 1150
San Luis Obispo, CA 93401

Nancy Siepel, Mitigation and Wildlife Connectivity Specialist
California Department of Transportation
District 5
50 Higuera St, Ste 1150
San Luis Obispo, CA 93401



Attachment A. Map of Wildlife Crossing Locations Evaluated by Pathways for Wildlife and Caltrans, Including Proposed Laurel Curve Wildlife Crossing Project. Source: Caltrans, 2015.