

Memorandum

TAB 80

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: October 19-20, 2016

Reference No.: 2.1a.(2) – **REPLACEMENT ITEM**
Action Item

From: NORMA ORTEGA
Chief Financial Officer

Prepared by: Bruce De Terra, Chief
Division of
Transportation Programming

Subject: **SHOPP AMENDMENT 16H-008**

RECOMMENDATION:

The California Department of Transportation (Department) recommends the California Transportation Commission (Commission) approve the requested State Highway Operation and Protection Program (SHOPP) Amendment 16H-008; in accordance with Senate Bill 486 which requires the Commission to approve any changes or new projects amended into the SHOPP. The amendment would be funded from the Advance Mitigation Reservation.

2016 SHOPP Summary of New Projects by Category	No.	FY 2016/17 (\$1,000)	FY 2017/18 (\$1,000)	FY 2018/19 (\$1,000)	FY 2019/20 (\$1,000)
Roadway Preservation	1				\$3,115
Total Amendments	1				\$3,115

ISSUE:

The Department recommends that the Highway 17 Wildlife Crossing near the City of Scotts Valley in Santa Cruz County be amended into the 2016 SHOPP for pre-construction project development, with the understanding that construction capital funding will be provided through \$5 million in county sales tax measure funding that is earmarked in a November 2016 local ballot measure plus approximately \$3 million in private funding to be raised by the Land Trust of Santa Cruz County (Land Trust). The Department may also provide construction support and will determine the funding amount as the project is developed.

The California Department of Fish and Wildlife (CDFW) and the Department are negotiating irrevocable mitigation credits that would be generated by this project, credits that would be used in the future for specified mitigation purposes on other Department project(s) within the Santa Cruz Mountains Bioregion. The formal agreement establishing the mitigation credits would be brought to the Commission for review and approval prior to the agreement being enacted.

BACKGROUND:

In each even numbered year, the Department prepares a four-year SHOPP which defines major capital improvements necessary to preserve and protect the State Highway System. Periodically, the Department amends the SHOPP to address newly identified needs prior to the next programming cycle. Senate Bill 486, approved by the Governor on September 30, 2014, requires Commission approval of projects amended into the SHOPP. This project was identified after Commission adoption of the 2016 SHOPP and this Book Item requests the amendment of the project into the 2016 SHOPP.

State Route (Highway) 17 connects the Santa Cruz County coastal area to Silicon Valley via a four-lane conventional highway that traverses the heavily forested Santa Cruz Mountains. The area is rich in biodiversity and is the focus of many conservation efforts that are being implemented on a broad scale. Highway 17 is the most significant roadway crossing the Santa Cruz Mountains, creating a challenging barrier to wildlife connectivity. The area of Laurel Curve, near the City of Scotts Valley, has been identified by CDFW as a key location for wildlife crossings. To help reduce wildlife mortality due to being struck by vehicles, the Land Trust purchased property on either side of Highway 17, totaling approximately 290 acres, with the intent of creating a wildlife crossing at that location. The Land Trust has been working with the Santa Cruz County Regional Transportation Commission, the CDFW and the Department to develop and fund the construction of a wildlife undercrossing at Laurel Curve. The crossing will connect the properties owned by the Land Trust, which in turn provide connectivity to other wildlands on either side of the highway and creates a wildlife corridor enabling animals to safely cross the highway.

The CDFW, through authority granted by Assembly Bill 2087 (Levine), is negotiating with the Department to quantify mitigation credits and create associated processes between the agencies to offset fish, wildlife and habitat resource impacts under CEQA Public Resources Code Section 21000 for future transportation projects. This particular project at Laurel Curve is the first such project under this authority and is being used by both the Department and CDFW to help establish a broader advance mitigation program. This project holds the promise of addressing wildlife mitigation issues early on at a regional or landscape level, thus reducing uncertainty and time in the environmental phase of future transportation projects while enabling large scale, long term habitat connectivity planning and implementation. This is a priority of the Administration.

Attachment

Reference No.: 2.1a.(2b)
 October 19-20, 2016
 Attachment
REPLACEMENT ITEM

List of New 2016 SHOPP Capital Project Amendments

PPNO	Dist-Co-Rte PM EA Project ID	Project Location and Description of Work	R/W Cost Const. Cost (\$1,000)	FY	Support Costs (\$1,000)	Program Code Leg. /Congr. Dists. Perf. Meas.
Collision Reduction						
2593	5-SCR-17 9.4/9.6 1G260 05 1400 0131	Near Scotts Valley, from 0.06 miles south of Laurel Road to 0.25 miles north of Laurel Road. Construct wildlife undercrossing. FCO for PA&ED, PS&E and R/W only. Local contributions to fund remaining components. <hr/> PAED: 09/01/17 R/W: 10/01/19 RTL: 03/24/20 BC: 11/03/20	\$138 (R/W) \$0(C)	19/20	PA & ED \$738 PS & E \$2,013 RW Sup \$226 Con Sup \$0 <hr/> Total \$2,977	201.240 Assembly: 29 Senate: 17 Congress:18 1 Location



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.

Conserving California's Wildlife Since 1870

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.

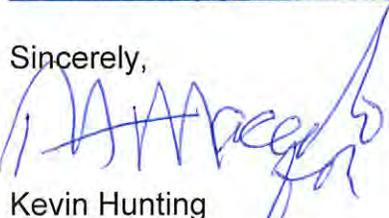
Brian Annis, Undersecretary
California State Transportation Agency
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CDFW's determination of the Wildlife Crossing's suitability for compensatory mitigation values may not be treated as a final commitment until the completion of any required CEQA process (Notice of Determination filed), and any such determination may be subject to change, modification, or revocation in the event CDFW finds that 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
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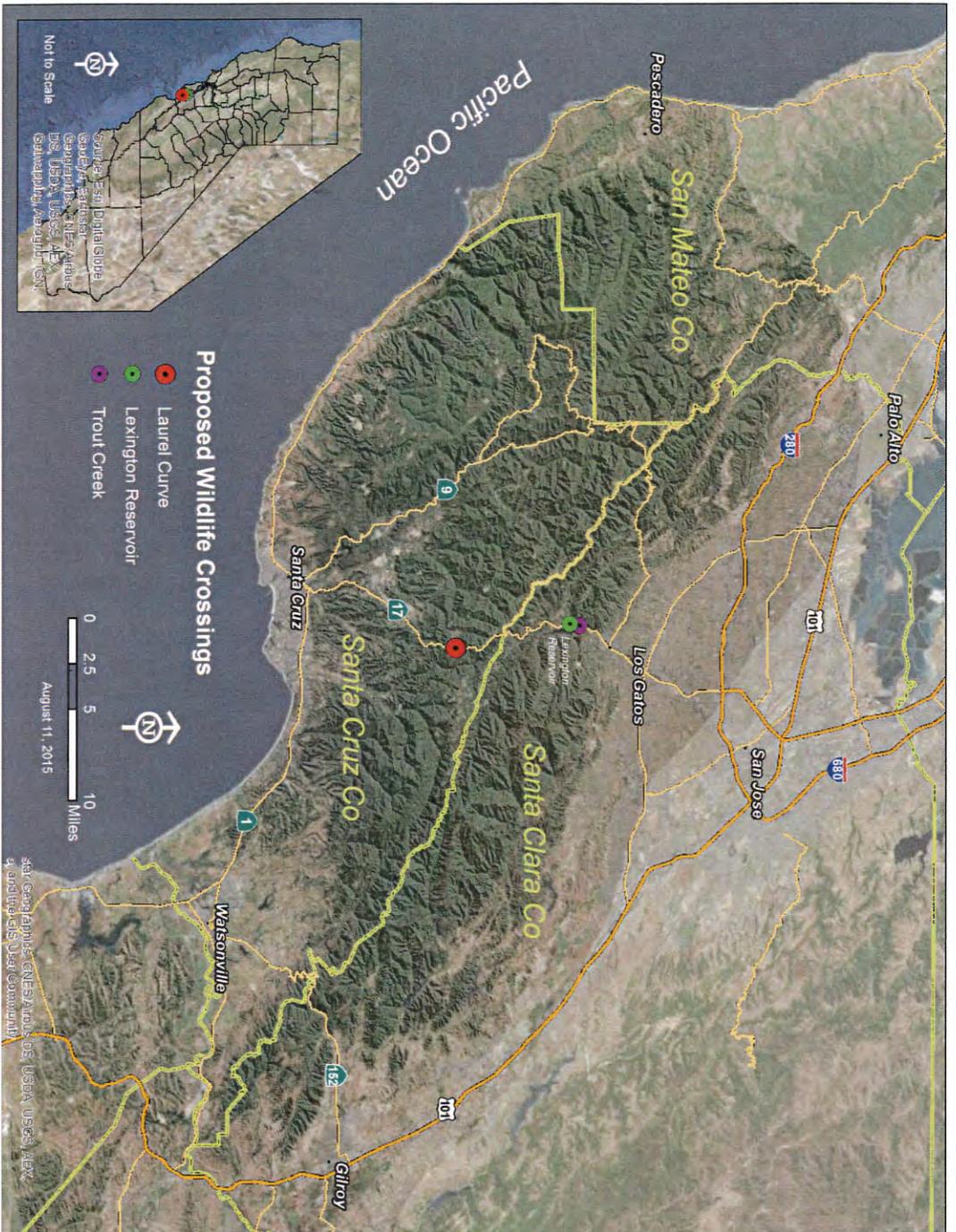
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Attachment A. Map of Wildlife Crossing Locations Evaluated by Pathways for Wildlife and Caltrans, Including Proposed Laurel Curve Wildlife Crossing Project. Source: Caltrans, 2015.



SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION
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October 10, 2016

Chair Bob Alvarado
California Transportation Commission
1120 N Street, MS-52
Sacramento, CA 95814

Re: **Tab 80 - 2016 SHOPP Amendment - Highway 17 Wildlife Crossing**

Dear Chair Alvarado and Commissioners:

The Santa Cruz County Regional Transportation Commission (RTC) appreciates Caltrans' and the California Transportation Commission's consideration and support to amend the Highway 17 Wildlife Crossing Project into the 2016 State Highway Operation and Protection Program (SHOPP). This is an important partnership project that will improve safety for drivers, reduce wildlife fatalities, serve as advance mitigation for future transportation projects and leverage a significant amount of local and private funds.

Highway 17 winds through the Santa Cruz Mountains ("the Hill"), serving as the primary route connecting Santa Cruz County and the San Francisco Bay Area. Despite steep grades, narrow shoulders, tight curves, and scenic beauty, Highway 17 has become a specialized workhorse highway used by over 60,000 vehicles per day. In addition to serving as a lifeline route for Santa Cruz County and rural Santa Clara County residents, it also serves heavy inter-regional commuter and tourist traffic and it is the principal and shortest route for delivering goods between the Bay Area and Santa Cruz County. Unfortunately, because of the mountainous terrain, the roadway has significant collision levels and has been identified as a Safety Corridor by the California Highway Patrol (CHP).

The RTC and Caltrans Districts 4 and 5 have been working in collaboration with the CHP, local law enforcement and fire departments, and the Metropolitan Transportation Commission (MTC) for many years, through the Safe on 17 Task Force, to reduce collisions on Highway 17. Transportation and safety agencies on both sides of the hill have been implementing a range of strategies to reduce collisions on the Highway 17 corridor, including enhanced CHP enforcement, roadway improvements and public education. Common causes of collisions on SR17 (driving at unsafe speeds, vehicle right-of-way violations, improper turning and improper lane change) are exacerbated as drivers swerve to avoid wildlife attempting to cross the highway.

In order to improve safety for both drivers and wildlife, the Land Trust of Santa Cruz County has been collaborating with Caltrans and the RTC to create a safe passage for wildlife across Highway 17. This project has overwhelming support from the community to address the high number of wildlife fatalities, habitat fragmentation, and driver safety. Caltrans District 5 has completed the Project Initiation Document (PID) for this project which created the opportunity for the wildlife undercrossing to be funded through the 2016 SHOPP Advanced Mitigation reservation.



SANTA CRUZ COUNTY REGIONAL TRANSPORTATION COMMISSION

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This project addresses numerous vital state priorities including:

- Improve motorist safety by reducing the number of collisions on Highway 17 related to wildlife crossing the highway whether direct collisions with wildlife or collisions that occur in order to avoid wildlife.
- Develop advanced mitigation credits so that future Caltrans projects can move more quickly and cost effectively to construction. CA Department of Fish and Wildlife have committed to working with Caltrans staff to determine advanced mitigation crediting.
- Enhancements to wildlife connectivity – Numerous local and state agencies have recognized the tremendous importance of a wildlife undercrossing of Highway 17 to connect the Santa Cruz Mountains habitat for many species including mountain lion, bobcat and deer.
- Numerous Caltrans projects have added miles of median barriers and guardrails which have substantially reduced access for wildlife to cross the highway. The undercrossing will provide a means for wildlife to safely cross under the highway while improving safety for traveling motorists.
- Leverage regional funding – Land Trust of Santa Cruz County has already raised over \$5 million for right of way and protecting the properties on both sides of the highway and is fundraising for \$3 million more for construction of the wildlife tunnel. The RTC has expressed their support by including \$5 million toward the project if a countywide sales tax measure is passed in November 2016.
- Assembly Bill 2087 (Levine), signed by the governor in September 2016, establishes a pilot project for a regional conservation investment strategy program. The Highway 17 wildlife crossing project, a high profile project with interest around the state, would be the first project of this program to establish advance mitigation credits.

The RTC is pleased to support this valuable project and recommend the Highway 17 Wildlife Crossing project be amended to the 2016 SHOPP project list.

Sincerely,

George Dondero
Executive Director

cc: Tim Gubbins, Caltrans D5 Director

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