

Date of Hearing: July 1, 2021

ASSEMBLY COMMITTEE ON WATER, PARKS, AND WILDLIFE

Eduardo Garcia, Chair

SB 790 (Stern) – As Amended May 20, 2021

SENATE VOTE: 39-0

SUBJECT: Wildlife connectivity mitigation credits

SUMMARY: Requires the Department of Fish and Wildlife (DFW), to provide compensatory mitigation credits to support modifications and planning of projects on the state highway system that improve local and regional habitat connectivity and result in environmental improvements, as specified. Specifically, **this bill:**

- 1) Requires the DFW, in consultation with the Department of Transportation (Caltrans), to provide compensatory mitigation credits to support modifications and planning of projects on the state highway system that improve local and regional habitat connectivity and result in fish passage, wildlife connectivity, and other environmental improvements.
- 2) Specifies that other environmental improvements may include, but are not limited to, all of the following:
 - a) An overpass or underpass.
 - b) Vegetation management.
 - c) Directional fencing.
 - d) Barrier modification.
- 3) Prohibits the DFW from providing compensatory mitigation credits for more than 10 new transportation projects, or for more than two of those projects in each Caltrans region, in each fiscal year.
- 4) Requires the DFW to consider all of the following in determining the value of compensatory mitigation credits for actions undertaken by Caltrans:
 - a) The impact on the ability of wildlife to access the opposite side of the roadway, including the length of the barrier, the distance of roadway until the next wildlife crossing, and the number of lanes that wildlife would need to cross.
 - b) The value of the habitat on the opposite side of the roadway, including impacts on genetic diversity, wildlife migration, and access to additional latitudes and altitudes of habitat to adapt to climate change.
 - c) The impact on critical terrestrial habitat linkages, including, but not limited to, the Santa Monica Mountains, Mountains and Rim of the Valley Corridor, Santa Ana Mountains, San Gabriel Mountains, San Bernardino Mountains, Santa Cruz Mountains, and the Gabilan Mountain Range.
 - d) Topography, watercourse presence, vegetative cover, mortality data, or other factors that increase the likelihood of use, or value of, a particular location for connectivity.

- 5) Authorizes the DFW and Caltrans to consult with the United States Fish and Wildlife Service, the National Marine Fisheries Service, and the United States Army Corps of Engineers in determining the value of the compensatory mitigation credits.
- 6) Authorizes Caltrans to request that the DFW issue credits for actions that Caltrans takes to improve fish and wildlife connectivity in connection with a project on the state highway system in excess of any legally required mitigation. Authorizes Caltrans to use those credits to satisfy obligations to mitigate the impacts of projects on the state highway system on fish and wildlife in the same Caltrans district as required by the California Environmental Quality Act, the California Endangered Species Act, or the Lake and Streambed Alteration Program.
- 7) Allows the DFW to develop an in-lieu fee program to implement the provisions of this bill.
- 8) Defines, for the purposes of this bill, the following terms:
 - a) "Region" means a Department of Transportation district.
 - b) "Transportation project" means a project to construct or improve a portion of the state highway system.
- 9) Makes various findings and declarations about climate change, land use change, and the importance of wildlife corridors and connectivity between existing core habitat areas.

EXISTING LAW:

- 1) Vests DFW with jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species [Fish and Game Code (FGC) § 1802].
- 2) Authorizes the development of Natural Community Conservation Plans (NCCPs) to provide comprehensive management and conservation of wildlife, as provided (FGC § § 2800 *et seq.*).
- 3) Establishes the voluntary Regional Conservation Investment Strategy (RCIS) pilot program that identifies and prioritizes regional conservation through a science-based public process while also encouraging investments in conservation through advance mitigation (FGC § § 1850 *et seq.*).
- 4) Requires the DFW to investigate, study, and identify those areas in the state that are most essential as wildlife corridors and habitat linkages, as well as the impacts to those wildlife corridors from climate change (FGC § 1930.5).
- 5) Vests Caltrans with full possession and control of the state highway system, and requires Caltrans to make improvements to and maintain the state highway system (Government Code § 14000.5).
- 6) Requires Caltrans to prepare an annual report to the Legislature describing the status of progress in locating, assessing, funding, and remediating barriers to fish passage, and requires an assessment of potential barriers to fish passage prior to commencing project design (Streets and Highways Code § § 156 *et seq.*).
- 7) Establishes the Transportation Permitting Task Force, and requires the task force to develop a structured coordination process for early engagement of all parties in the development of

transportation projects to reduce permit processing time, establish reasonable deadlines for permit approvals, and provide for greater certainty of permit approval requirements (Streets and Highways Code § 155.7)

- 8) Creates the Advance Mitigation Program in Caltrans to enhance communications between Caltrans and stakeholders to protect natural resources through project mitigation, to meet or exceed applicable environmental requirements, to accelerate project delivery, and to mitigate, to the maximum extent required by law, environmental impacts from transportation infrastructure projects (Streets and Highways Code § § 800 *et seq.*).
- 9) Creates the Advance Mitigation Account and continuously appropriates moneys in the account for purposes of the Advance Mitigation Program. Authorizes funds in the account to be used for specified activities, including, among others things, for purchasing, or funding the purchase of, credits from mitigation banks, conservation banks, or in-lieu fee programs approved by one or more regulatory agencies and, under certain circumstances, for implementing, or funding the implementation of, advance mitigation (Streets and Highways Code § 800.6, § 800.7).

FISCAL EFFECT: Unknown. This bill is keyed fiscal.

COMMENTS:

- 1) **Purpose for the bill.** According to the author:

As Californians respond to the changing nature of our state due to natural events, such as fires, drought, and flooding, the impact of these same events on wildlife are often overlooked. In recent years the changing face of our state has resulted in changing migration patterns and habitats for much of California's wildlife. In seeking out shelter, food, and water, wildlife will risk crossing roads and railways which results in expensive vehicle collisions, injury, and death. The wildlife-vehicle collisions reported in 2018 alone caused 314 instances of injury, an estimated 5 deaths, and over \$230 million in economic and social costs in California. It is critical that we take steps to ensure that wildlife can migrate safely to prevent further harm to California's unique biodiversity as well, and prevent additional harm to California residents.

- 2) **Background:** The state's transportation system – highways, local roads, and rail – can be an obstacle for wildlife seeking to move between different parcels of the same type of habitat. Intact biological corridors help maintain healthy populations of plants and animals by allowing genetic exchange, species migration, and repopulation following catastrophes. Infrastructure such as wildlife crossings decrease incidents of fatal collisions by giving animals an alternate route to cross busy roads. A crossing is typically an underpass or an overpass that allows animals to cross from one side of the road to the other. Barriers to fish passage (such as culverts that carry a stream under a road) prevent aquatic species from reaching the upstream habitat where they breed and grow. The removal of dams and increasing culvert size can return upstream access for fish species.

Wildlife-vehicle collisions. Wildlife-vehicle collisions are a significant threat to public health and safety, and result in numerous animal fatalities. According to data from the California Highway Patrol (CHP), approximately 8,000 large game wildlife-vehicle collisions have occurred statewide over the last six years resulting in over 1,500 injuries and at least 24 fatalities to motorists and passengers. For context, there are on the order of 500,000 traffic

accidents annually statewide.

However, it is important to note that the CHP does not have information on every collision and not all collisions are reported. In contrast to the CHP data, researchers at the UC Davis Road Ecology Center estimate that about 20,000 California vehicles collide with deer annually, accounting for about 90 percent of wildlife collisions. State Farm Insurance estimated that California had more than 23,000 collisions with large wildlife a year based on insurance claim rates for 2017-2018.

The Road Ecology Center estimates that the total cost of reported wildlife-vehicle collisions for 2017 was at least \$300 million and could be as high as \$600 million if accidents claimed to insurance companies but not reported to law enforcement are included. Based on Road Ecology Center data, the number of reported wildlife-vehicle collisions and their costs have increased over the past few years.

Wildlife impacts. Caltrans and local agencies are estimated to remove tens of thousands of roadkill carcasses from roads and highways each year. The exact extent of removals is not well known as data on such removals is not consistently kept. Each Caltrans district establishes its own procedures for handling roadkill on state roads and not all Caltrans districts keep data on roadkill removal. The data that are collected are not always consistent, often lack information on location of removal, and are not readily available to the public. Caltrans spent approximately \$645,300 statewide on roadside dead animal carcass cleanup during 2018 out of a total of \$100 million for litter cleanup. This amount does not include the cost of removal if the dead animal was found and removed during separate, unrelated maintenance.

According to materials received from the author, a four-year-old male mountain lion known as P-61 was struck and killed while crossing Interstate 405 in Los Angeles in September 2019. The lion managed to cross five of the ten traffic lanes before being fatally struck. The Santa Cruz Puma Project has documented 35 mountain lion deaths on roadways in Santa Cruz and nearby counties since 2008. Researchers believe approximately 100 mountain lions are killed each year while crossing roads and highways across the state.

Man-made barriers to salmonid migration include road/stream crossings, irrigation diversions, and dams. Road/stream crossings are extremely numerous and often cross multiple road ownerships within a watershed. Passage impediments and delays in migration affect both adult and juvenile fish. Given the magnitude and severity of the problem, reconnecting isolated stream habitat has become an important priority for the restoration of impaired anadromous salmon and steelhead stocks. SB 857 (Kuehl), Chapter 589, Statutes of 2005, requires Caltrans to complete an assessment of potential barriers to anadromous fish prior to commencing any project using State or Federal transportation funds. In addition to the expectation that both Caltrans and the DFW would develop a mutual list of priority barriers occurring along transportation corridors, a request was made to the DFW to provide a statewide list of priority barriers based on significance to fish migration and independent of who manages or is responsible for the stream crossing. Caltrans is required to report on progress to address barriers to fish passage, and its most recent report states that in 2018 Caltrans completed remediation activities at five fish passage barrier locations, improving access to an estimated 31 miles of salmonid habitat.

Use of wildlife-vehicle collision data. Since 2009, the Road Ecology Center has run a webpage portal for reporting roadkill spotted along California roads. The California Roadkill Observation System (CROS) allows anyone to report the species and location and to upload a picture. Over the last 10 years, CROS has received more than 60,000 reports of roadkill from a few thousand volunteers. UC Davis researchers have used this data to help identify wildlife-vehicle conflict hotspots, with an ultimate goal of identifying cost-effective areas for wildlife crossings and other measures to improve road safety.

The UC Davis Road Ecology Center's 2018 report on wildlife-vehicle collision hotspots using existing information notes numerous locations where the costs of wildlife crossings or similar safety projects would be significantly less than the vehicle repair and medical costs avoided by reduced collisions. Wildlife-vehicle collision data are already being used on a project to project basis in some local areas, but typically only a few projects per year.

Priority wildlife barriers. In 2020, the DFW released a list of priority wildlife movement barriers in the state. This list complements the list the DFW prepares for fish passage priorities, as mentioned above. Approximately 150 segments of linear infrastructure in the DFW's six regions statewide were initially identified using a range of criteria including known areas of high wildlife mortality due to infrastructure use, and areas where good quality habitat on adjacent lands exists, among others. In each region, the 10 highest priority projects were selected for inclusion in the final list, although the DFW noted that incomplete information may have kept some equally high priority projects from being identified. Of the 61 highest priority segments, 58 were part of the state highway system. The three other segments were a railway, a road and a canal. The total length of the priority segments identified is 610 miles. The segments represent barriers to migration of big game as well as mountain lion, fox, bobcat, kit fox, fisher, badger, California tiger salamander, California red-legged frog and arroyo toad, among others.

Planning and funding mitigation. There are a variety of existing programs that fund or provide the framework for the environmental mitigation necessary for certain projects. The California Natural Resources Agency's grant program – the Environmental Enhancement and Mitigation Program – offers grants to local, state and federal government agencies and to nonprofit organizations for projects to mitigate the environmental impacts cause by new or modified public transportation facilities.

According to the DFW, the Conservation and Mitigation Banking Program is composed of privately or publicly owned land managed for its natural resource values. In exchange for permanently protecting, managing, and monitoring the land, the bank sponsor is allowed to sell or transfer habitat credits to permittees who need to satisfy legal requirements and compensate for the environmental impacts of certain projects. According to the DFW website, the conservation banks are typically used to protect threatened and endangered species and habitat, while the mitigation banks are typically used to protect, restore, create, and enhance wetland habitats.

NCCPs. The NCCP program is the state analogue to the federal Habitat Conservation Plan (HCP). An HCP describes a project, the anticipated effects of the project on the proposed take of certain species, how those project impacts will be minimized or mitigated, and how the HCP is to be funded. The HCP is an essential component of obtaining an incidental take permit, required where a project will result in the take of a species listed under the federal

Endangered Species Act. HCPs can apply to both listed and non-listed species. NCCPs are generally part of combined NCCP/HCPs. NCCP/HCPs must meet conservation standards that provide for the recovery of species within the planning area. There are at least 14 approved NCCPs as of April 2020 that are located throughout the state.

RCIS. In 2017, the RCIS pilot program was established to encourage a voluntary, non-regulatory regional planning process intended to result in higher-quality conservation outcomes. The RCIS program uses a science-based approach to identify conservation and enhancement opportunities that, if implemented, will help California's declining and vulnerable species by protecting, creating, restoring, and reconnecting habitat, and may contribute to species recovery and adaptation and resilience to climate change. There are three components: regional conservation assessments, regional conservation investment strategies, and mitigation credit agreements. There are four approved RCIS, two under development, and a mitigation credit agreement (MCA) pilot program is under development. According to the most recent DFW report, RCIS projects in various stages of approval cover almost 10 million acres (10 percent of the state). It may take many years for there to be approved voluntary RCIS and approved corresponding MCAs available throughout the state.

Caltrans' Advance Mitigation Program. Under SB 1 (Beall), Chapter 5, Statutes of 2017, an Advance Mitigation Program was created at Caltrans to protect natural resources through transportation project mitigation, among other things. The program is intended to mitigate environmental impacts from transportation infrastructure projects to the maximum extent required by law. In implementing the program, Caltrans is required to consult with the DFW. Funds available within the program can be used to purchase or fund the purchase of credits from mitigation banks, or conservation banks; pay mitigation fees associated with a NCCP or HCP; prepare a regional conservation assessment and RCIS; and participate in a mitigation credit agreement through an approved RCIS or perform mitigation to advance the RCIS. Currently no more than 25 percent of the funds in the Caltrans Advance Mitigation Account may be allocated for fish passage and wildlife connectivity that would provide credits for permit-required mitigation.

The DFW is required every two years to report to the Legislature on the quality and effectiveness of habitat mitigation provided by Caltrans under the Advance Mitigation Program. In the second report, dated September 2020, the DFW reports that no habitat mitigation Advance Mitigation Program-specific projects had been completed, but that the DFW has reviewed the first Regional Advance Mitigation Needs Assessment for one of Caltrans' district, several more were in progress, and up to 12 were expected to be completed within 2 years. The DFW also recommended that projects that benefit multiple species and habitat be maximized through the program, where feasible; that the program take advantage of DFW programs that generate advance mitigation (Conservation and Mitigation Banking, NCCP, and RCIS and the associated MCAs); and that local expertise be leveraged for specific advance mitigation projects, among other things.

Transportation permitting task force. AB 1282 (Mullin), Chapter 643, Statutes of 2017, established a transportation permitting task force. The task force's report, issued in June 2020, included recommendations to accelerate much-needed transportation infrastructure projects while furthering the missions of both transportation and environmental protection agencies. This bill seeks to implement some of the recommendations of the report related to facilitating mitigation, including Recommendation 6.2: Establish crediting framework for

projects that result in fish passage and wildlife connectivity and other environmental improvements.

Mitigation for habitat connectivity. While all of the above programs address environmental mitigation for different types of development projects, none are primarily targeted at habitat connectivity. There are numerous already-identified locations across the state on roadways under Caltrans' jurisdiction where the installation of wildlife crossings or incorporation of features designed to facilitate safe movement of wildlife would both help to protect wildlife and improve public safety.

This bill would allow the DFW to issue compensatory mitigation credits for up to 10 Caltrans projects per fiscal year that improve local and regional habitat connectivity and result in fish passage, wildlife connectivity, and other environmental improvements. The DFW would need to calculate the value of these projects in order to issue credits. Most existing programs are species or habitat specific, so it is unclear exactly how these calculations would happen. The ability to utilize the credits to offset the impacts of future projects is intended to incentivize Caltrans to consider and include habitat connectivity in more of its projects.

- 3) **Suggested Committee Amendment.** While the proposed mitigation credits are able to be utilized to fulfill existing regulatory mitigation requirements, it is unclear whether a new program at the DFW would be required to implement the provisions of this bill. *The committee may wish to make a technical amendment that authorizes the DFW to utilize existing programs to implement the provisions of the bill where feasible.*

Due to the timing between hearings, this amendment will be taken in the Assembly Transportation Committee.

- 4) **Dual-referral.** This bill is double-referred to the Assembly Transportation Committee. Elements of the bill under the Assembly Transportation Committee's jurisdiction will be discussed before that Committee, and are included here for completeness and context only.
- 5) **Arguments in Support.** A coalition letter from wildlife organizations, conservation organizations, local parks, and open space districts state that the bill "gives the DFW clear authority to provide Caltrans an incentive to retrofit existing highway infrastructure with wildlife passage features by issuing Caltrans compensatory mitigation credits that can be used for future projects requiring environmental mitigation."
- 6) **Support if Amended.** A large coalition of similar organizations writes with a support if amended position and requests amendments to 1) require the DFW to update its list of priority wildlife movement barriers; 2) authorized Caltrans to plan, design, and implement connectivity projects and consider project impacts on wildlife movement; 3) require the creation of a roadkill data collection program; and 4) strengthen the state's policy promoting wildlife corridors and habitat strongholds beyond voluntary steps.
- 7) **Related Legislation.**

AB 1189 (Bloom, 2021) would prohibit Caltrans from charging for administration indirect cost recovery for any wildlife crossing project that receives private funding for more than 50 percent of the project cost, as provided. The bill was not heard in Assembly Transportation Committee.

SB 1372 (Monning and Stern, 2020) would have instituted structural reforms to facilitate wildlife corridors, among other things. The bill was not moved by the author due to the COVID-19 pandemic.

SCR 62 (Stern, 2019) would have named a wildlife crossing overpass to-be-constructed over Highway 101 in Los Angeles County west of the Liberty Canyon freeway exit. The bill died in the Assembly Appropriations Committee.

SB 395 (Archuleta), Chapter 869, Statutes of 2019, authorizes the Fish and Game Commission, upon appropriation, to establish a pilot wildlife salvage permit program authorizing the roadkill of certain game species to be taken for human consumption, and, upon appropriation, authorizes the DFW to take certain actions to support the salvage pilot program, as specified.

AB 1282 (Mullin), Chapter 643, Statutes of 2017, establishes a Transportation Permitting task force, as specified.

SB 1 (Beall), Chapter 5, Statutes of 2017, increases several taxes and fees to raise roughly \$5.2 billion in new transportation revenues annually, and establishes the Advance Mitigation Program, among things.

AB 2087 (Levine), Chapter 455, Statutes of 2016, authorizes the DFW to approve RCIS's to identify and provide voluntary guidance for regional conservation, and to encourage investments in conservation through advance mitigation.

SB 857 (Kuehl), Chapter 589, Statutes of 2005, requires Caltrans to prepare an annual report to the Legislature describing the status of the department's progress in locating, assessing, and remediating barriers to fish passage, as defined. SB 857 requires Caltrans to also complete assessments of potential barriers to anadromous fish prior to commencing any project using state or federal transportation funds.

REGISTERED SUPPORT / OPPOSITION:

Support

Arroyos & Foothills Conservancy
California Association of Zoos and Aquariums
California Waterfowl Association
Citizens for Los Angeles Wildlife (CLAW)
Coastal Ranches Conservancy
Cougar Conservancy
Endangered Habitats League
Escondido Creek Conservancy, The
Friends of Harbors, Beaches and Parks
Hills for Everyone
In Defense of Animals
Laguna Greenbelt Inc.
Land Trust of Santa Cruz County
Madrone Audubon Society, Sonoma County

Midpeninsula Regional Open Space District
Mountains Recreation and Conservation Authority
National Wildlife Federation
Nature for All
Pathways for Wildlife
Paula Lane Action Network
Placer Land Trust
Planning and Conservation League
Santa Clara Valley Open Space Authority
Santa Monica Mountains Fund
SC Wildlands
Sonoma County Agricultural Preservation and Open Space District
The Trust for Public Land
Thousand Oaks, City of
Ventura County Transportation Commission
Ventura, County of

Opposition

None on file

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