

Date of Hearing: April 18, 2022

ASSEMBLY COMMITTEE ON TRANSPORTATION

Laura Friedman, Chair

AB 2344 (Friedman) – As Amended April 6, 2022

**SUBJECT:** Wildlife connectivity: transportation projects

**SUMMARY:** Requires the Department of Fish and Wildlife (DFW) to establish a wildlife connectivity action plan, and requires the Department of Transportation (Caltrans) to establish a wildlife connectivity project list and implement projects from the list, among other provisions related to reducing wildlife-vehicle collisions and enhancing wildlife connectivity. Specifically, **this bill:**

- 1) Requires the DFW to investigate, study, and identify those areas in the state that are essential to wildlife movement and habitat connectivity and that are threatened by specified factors.
- 2) Requires the DFW, in coordination with Caltrans, to establish a wildlife connectivity action plan (action plan) on or before January 1, 2024, and to update the action plan at least once every five years thereafter. Allows the DFW to amend the action plan before a full update, as needed.
- 3) Requires the action plan to include, among other things, data on wildlife-vehicle collisions, maps that identify the locations of specified areas, and a number of specified assessments.
- 4) Requires the DFW and Caltrans to consult with and actively seek the involvement of both federally recognized and non-federally recognized Native American tribes in the development of the action plan.
- 5) Requires Caltrans, in consultation with DFW, to establish a wildlife connectivity project list of wildlife passage projects where the implementation of wildlife passage features would reduce wildlife-vehicle collisions and enhance wildlife connectivity (project list), on or before January 1, 2024. Requires Caltrans to update the project list no later than January 1, 2025, and every two years thereafter.
- 6) Requires the project list to be included in the action plan developed by the DFW.
- 7) Requires Caltrans to make a draft project list publicly available for public comment before completing the initial list or an update to the project list.
- 8) Requires Caltrans to implement, on or before January 1, 2026, and on an annual basis thereafter, at least ten projects identified on the project list.
- 9) Requires Caltrans, in consultation with the DFW, to prioritize the implementation of projects on the project list based on specified factors, including, among others, the project's ability to enhance connectivity and permeability within a connectivity area or natural landscape area identified in the action plan.
- 10) Requires Caltrans to develop a programmatic environmental review process with appropriate state and federal regulatory agencies for remediating barriers to wildlife movement that will streamline the permitting process for wildlife crossing projects.

- 11) Requires Caltrans to complete assessments of potential barriers to wildlife movement before commencing project planning, and again during project design, for any project that uses state or federal transportation funds after January 1, 2023, and that is located in an area identified as a connectivity area or a natural landscape area in the action plan, and requires Caltrans to submit these assessments to the DFW.
- 12) Requires Caltrans projects to be constructed without presenting barriers to fish and wildlife movement.
- 13) Defines, for purposes of the bill, the following terms: connectivity area, natural landscape area, wildlife connectivity action plan, wildlife connectivity project list, permeability and wildlife passage features.
- 14) Declares that it is the policy of the state to protect, restore, and enhance the functioning of fish and wildlife and habitat connectivity in connection with the planning, construction, improvement, operation, and maintenance of transportation infrastructure throughout the state.
- 15) Makes findings and declarations relating to wildlife connectivity, wildlife-vehicle collisions, and the impacts of climate change to biodiversity.

**EXISTING LAW:**

- 1) Vests the DFW with jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species.
- 2) Authorizes the DFW to approve compensatory mitigation credits for wildlife connectivity actions taken under specified programs.
- 3) 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.
- 4) 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.
- 5) 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.
- 6) Creates the Advance Mitigation Program (AMP) 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.
- 7) Creates the Advance Mitigation Account (account) and continuously appropriates moneys in the account for purposes of the AMP. 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.

**FISCAL EFFECT:** Unknown

**COMMENTS:** 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. An 18-year study found that reconnected landscapes had nearly 14% more plant species compared to fragmented habitats, and that number is likely to continue to rise as time passes.

A lack of wildlife crossing infrastructure in our state road system has resulted in a transportation system that can pose a detriment to California's people, wildlife, and natural ecosystems. Improving wildlife habitat connectivity across roads is highly effective at reducing wildlife collisions, reducing the impacts of roads on imperiled species, improving climate change resilience by facilitating migration, and making travel on roadways safer.

Built 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 overpass or an underpass 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 upstream habitat where they breed and grow. The removal of dams and increasing the size of culverts can return upstream access for fish species. Culverts, when sized correctly, can also be utilized by terrestrial 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), more than 8,000 large game wildlife-vehicle collisions have occurred statewide from 2014 to 2020 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.

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% 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. U.C. Davis' Roadkill Hotspot Report states, "Between 2016 and 2020, inclusive, 302 mountain lions and 557 black bears were reported killed on roads."

*Fish and 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 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.

Researchers believe approximately 100 mountain lions are killed each year while crossing roads and highways across the state. 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.

Man-made barriers to fish migration include road or stream crossings, irrigation diversions, and dams. Road or 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 restoration, particularly for 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. Caltrans is required to report on progress to address barriers to fish passage, and its two most recent reports state that remediation activities were completed at five fish passage barrier locations in 2018 and four fish passage barriers in 2019, improving access to an estimated 31 miles and 5.5 miles of salmonid habitat respectively.

*Priority wildlife barriers:* In 2020, the DFW released a list of priority wildlife movement barriers in the state. This list complements the list of fish passage priorities, as mentioned above. Approximately 150 segments of linear infrastructure in the DFW's six regions 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. In each region, the 10 highest priority projects were selected for inclusion in the final list, though 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. The DFW is in the process of updating the 2020 list, and the update should be made public by mid-2022.

*Caltrans' Advance Mitigation Program:* Under SB 1 (Beall), Chapter 5, Statutes of 2017 the AMP 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. Currently no more than 25% 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 AMP. In its September 2020 report, the

DFW indicated that no habitat mitigation AMP-specific projects had been completed; however, DFW had reviewed the first Regional Advance Mitigation Needs Assessment for one Caltrans' district, several more were in progress, and up to 12 were expected to be completed within two years. The DFW also recommended that projects that benefit multiple species and habitat be maximized through the AMP, where feasible; that the AMP take advantage of DFW programs that generate advance mitigation; and that local expertise be leveraged for specific advance mitigation projects, among other things.

This bill seeks to address the habitat fragmentation and wildlife-vehicle collisions caused by insufficient transportation infrastructure to facilitate safe passage for wildlife across the state highway system. This bill requires a statewide plan, better implementation of current programs, and a robust project list in order for the state to better prioritize wildlife corridors within transportation infrastructure. Current state policy has been insufficient to implement wildlife passage features at the pace and scale necessary to address species facing local extirpation due to the habitat fragmentation caused by roads. This bill is necessary to guide the interagency coordination and information sharing to meaningfully enhance permeability on the state highway system.

*Funding available for wildlife crossings:* While the cost of a wildlife crossings can be significant, and range from \$1.5 million to \$150 million within the state, California spends approximately \$30 billion annually on transportation projects. Recent state and federal allocations for wildlife crossings can aid in incorporating wildlife crossings more regularly as part of the state's transportation infrastructure. As part of the 2021 Budget, Governor Newsom allocated \$61 million to build wildlife crossings across the state. President Biden's Infrastructure Investment and Jobs Act (IIJA) includes \$350 million nationwide over five years for a wildlife crossing pilot program, and adds wildlife crossings as eligible for funding under the Nationally Significant Freight and Highway (NSFH) program.

*According to the author,* "The lack of wildlife connectivity on California's highway system poses a major threat, not only to drivers and passengers, but to the imperiled species that contribute to the state's rich biodiversity. In 2018, reported wildlife-vehicle collisions resulted in 314 injuries and an estimated five deaths. Many more crashes with wildlife are believed to go unreported. Wildlife-vehicle collisions also take an economic toll. The reported collisions in 2018 alone resulted in more than \$230 million in economic and social costs. Wildlife crossings have been shown to reduce wildlife vehicle collisions by up to 98% and facilitate wildlife movement. AB 2344 requires Caltrans and the California Department of Fish and Wildlife to identify areas with high rates of wildlife-vehicle collisions and implement 10 priority projects per year that improve connectivity with passage features like overpasses, underpasses and directional fencing. These projects will make roads and highways much safer while giving mountain lions, desert tortoises, California tiger salamanders and other iconic species of California a chance at survival."

***In support,***

*Previous legislation:* SB 790 (Stern), Chapter 738, Statutes of 2021, authorizes the DFW to approve compensatory mitigation credits for certain wildlife connectivity actions that measurably improve habitat connectivity or wildlife migration, such as adding an overpass or underpass for a roadway, as provided.

AB 1189 (Bloom), 2021-22 Session, would have prohibited Caltrans from charging administration indirect cost recovery for any wildlife crossing project that receives private funding for more than 50% of the project cost, as provided. The bill was never set for hearing in the Assembly Transportation Committee.

SB 1372 (Monning), 2019-20 Session, would have instituted structural reforms at the DFW and Caltrans to facilitate wildlife corridors, among other things. The bill was not moved by the author due to the COVID-19 pandemic.

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.

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 AMP, among other provisions.

SB 857 (Kuehl), Chapter 589, Statutes of 2005, requires Caltrans to prepare an annual report to the Legislature describing the status of Caltrans' 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**

Amah Mutsun Land Trust  
Animal Legal Defense Fund  
Animazonia Wildlife Foundation  
Arroyos & Foothills Conservancy  
Born Free USA  
Brentwood Alliance of Canyons & Hillsides  
California Chaparral Institute  
California Council for Wildlife Rehabilitators  
California Environmental Voters (formerly Clcv)  
California Institute for Biodiversity  
California North Coast Chapter of The Wildlife Society  
California State Parks Foundation  
California Wilderness Coalition  
California Wildlife Center  
California Wildlife Foundation  
Center for Biological Diversity  
Channel Islands Restoration  
Chileno Valley Newt Brigade  
Citizens for Los Angeles Wildlife (CLAW)  
Coastal Ranches Conservancy  
Conservation Society of California, Oakland Zoo

Defenders of Wildlife  
East Bay Zoological Society  
Eastwood Ranch Foundation  
Ecologistics  
Endangered Habitats League  
Environmental Protection Information Center  
Felidae Conservation Fund  
Forest Unlimited  
Friends of Ballona Wetlands  
Friends of Griffith Park  
Friends of Harbors, Beaches and Parks  
Friends of Plumas Wilderness  
Friends of The Inyo  
Green Foothills  
Greenbelt Alliance  
Hills for Everyone  
Hillside Federation  
Humane Society of The United States; the  
In Defense of Animals  
Klamath Forest Alliance  
Klamath Siskiyou Connectivity Project  
Las Virgenes Homeowners Federation, INC.  
Laurel Canyon Association  
Laurel Canyon Land Trust  
Live Oak Associates, INC.  
Living Systems  
Los Angeles Waterkeeper  
Los Padres Forestwatch  
Midpeninsula Regional Open Space District  
Mojave Desert Land Trust  
Mount Shasta Bioregional Ecology Center  
Mountain Lion Foundation  
Natural Resources Defense Council (NRDC)  
North Bay Bear Collaborative  
Ojai Valley Green Coalition  
Pacific Forest Trust  
Patagonia INC.  
Peninsula Open Space Trust  
People for The Ethical Treatment of Animals (PETA)  
Planning and Conservation League  
Poison Free Agoura  
Poison Free Malibu  
Predator Defense  
Preserve Wild Santee  
Project Coyote  
Protect San Benito County  
Raptors are The Solution  
San Bernardino Valley Audubon Society  
San Diego Humane Society and Spca

Santa Barbara Audubon Society  
Santa Clara Valley Audubon Society  
Santa Clara Valley Habitat Agency  
Santa Susana Mountain Park Association  
Save Open Space & Agricultural Resources  
Shasta Trinity Wildlife Group  
Sierra Club California  
Social 350 Climate Action  
Social Compassion in Legislation  
Sonoma County Agricultural Preservation and Open Space District  
Sonoma Land Trust  
Temescal Canyon Association  
The Big Wild  
The Cougar Fund  
The River Otter Ecology Project  
The Wildlands Conservancy  
True Wild LLC  
Unchainedtv  
Urban Wildlife Research Project  
Ventana Wilderness Alliance  
Ventura Citizens for Hillside Preservation  
Ventura Land Trust  
Volcan Mountain Foundation  
Voters for Animal Rights  
Western Sonoma County Rural Alliance  
Western Watersheds Project  
Wildfutures  
Wildlands Network  
Wildlife Emergency Services  
Women United for Animal Welfare

**Opposition**

None on file.

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