

Assembly Bill No. 2344

CHAPTER 964

An act to add Article 3.8 (commencing with Section 158) to Chapter 1 of Division 1 of, and to repeal Section 158.5 of, the Streets and Highways Code, relating to fish and wildlife.

[Approved by Governor September 30, 2022. Filed with
Secretary of State September 30, 2022.]

LEGISLATIVE COUNSEL'S DIGEST

AB 2344, Friedman. Wildlife connectivity: transportation projects.

Under existing law, the Department of Fish and Wildlife (DFW) has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. Existing law authorizes DFW to approve compensatory mitigation credits for wildlife connectivity actions taken under specified programs.

Existing law vests the Department of Transportation (Caltrans) with full possession and control of the state highway system. Existing law requires Caltrans to complete assessments of potential barriers to anadromous fish prior to commencing any project using state or federal transportation funds and requires projects to be constructed without presenting barriers to fish passage.

This bill would require Caltrans, in consultation with DFW and other appropriate agencies, to establish an inventory of connectivity needs on the state highway system where the implementation of wildlife passage features could reduce wildlife-vehicle collisions or enhance wildlife connectivity, as specified. The bill would require Caltrans, no later than July 1, 2024, to develop and publish the inventory and a list of funded transportation projects with wildlife passage features that address wildlife connectivity needs and would require Caltrans to update the inventory and the project list at least once every 2 years.

The bill would require Caltrans, for any project on the state highway system in a connectivity area that adds a traffic lane or that has the potential to significantly impair wildlife connectivity, to perform an assessment, in consultation with DFW, to identify potential wildlife connectivity barriers and any needs for improved permeability, as specified. The bill would require Caltrans to submit the assessment to DFW and, if any structural barrier to wildlife connectivity exists or will be added by the project for target species in the connectivity area, would require the implementing agency to remediate barriers to wildlife connectivity in conjunction with the project. The bill would authorize Caltrans to use compensatory mitigation

credits to satisfy these remediation requirements if DFW concurs with the use of those credits.

The bill would establish the Transportation Wildlife Connectivity Remediation Program, to be administered by Caltrans, in consultation with DFW, for the purposes of improving wildlife connectivity across transportation systems in connectivity areas. As part of the program, the bill would require Caltrans, upon appropriation by the Legislature, to develop a program of projects that support the remediation and improvement of wildlife connectivity across transportation systems, as specified. The bill would require Caltrans, in concurrence with DFW, to develop guidelines for the implementation of the program following one or more public workshops and an opportunity for the public to provide written comments. The bill would authorize Caltrans to receive compensatory mitigation credits for the implementation of a project in the program if DFW concurs with the creation of those credits.

The bill would require the department to update appropriate design guidance, including the Highway Design Manual, by July 1, 2025, to incorporate design concepts for wildlife passage features and related standard plans and specifications as appropriate.

The bill would require Caltrans to submit a report to specified committees of the Legislature by July 1, 2028, that includes recommendations for the provisions of the bill and describes the status of its progress in accomplishing the requirements of the bill.

The people of the State of California do enact as follows:

SECTION 1. (a) The Legislature finds and declares all of the following:

(1) Roads, highways, and other transportation infrastructure can adversely impact wildlife, as defined broadly in the Fish and Game Code and including endangered species, by causing both direct mortality from vehicle collisions and genetic isolation due to the reduction or elimination of habitat connectivity.

(2) Climate change is a significant threat to California's biodiversity. Because climate change is expected to significantly alter the habitat, ranges, and movement patterns of numerous species, ensuring that wildlife can safely move among protected habitat areas is essential if California is to maintain its native species and biodiversity in the face of rapid climate change.

(3) According to the UC Davis Road Ecology Center, every year in California, thousands of large and midsized wildlife are reported killed by vehicles in the state, including mule deer, black bears, coyotes, and mountain lions. Most roadkill is unreported, with tens of thousands of additional large and midsized wildlife and hundreds of thousands, and potentially millions, of small wildlife likely to be killed on California roads each year.

(4) In California, adverse impacts from roads are ranked a high or very high risk to all native turtle and tortoise species, 72 percent of snake species,

50 percent of frog and toad species, 18 percent of lizard species, and 17 percent of salamander species.

(5) Threatened and endangered species and populations such as the San Joaquin kit fox, California tiger salamander, arroyo toad, mountain lions, and numerous others are regularly killed by vehicles on California roads, further harming these already imperiled species.

(6) Wildlife crossing features can increase driver safety and are highly effective at reducing wildlife-vehicle collisions. Numerous readily available measures exist to avoid, minimize, or mitigate the impacts of roads on wildlife, including, but not limited to, the placement of exclusion and directional fencing and the construction of wildlife-friendly underpasses, overpasses, culverts, and elevated sections of road in key wildlife connectivity areas, and have proved successful in other states.

(7) Executive Order No. N-82-20 declared that it is the goal of the state to conserve at least 30 percent of California's land and coastal waters by 2030 in a manner that protects and restores biodiversity, enables enduring conservation measures on a broad range of landscapes, builds climate resilience, reduces risk from extreme climate events, and contributes to the state's efforts to combat climate change. Wildlife connectivity contributes to the preservation and restoration of biodiversity by ensuring that wildlife has the opportunity to move through the landscape to forage, find mates and reproduce, seek shelter from stochastic events like flooding or wildfires, and adapt to the impacts of climate change.

(8) The state highway system is under the full possession and control of the Department of Transportation and, as currently maintained, can impose significant barriers to wildlife habitat connectivity.

(9) The Department of Fish and Wildlife is the state's trustee agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the state Sections 711.7 and 1802 of the Fish and Game Code, Section 21070 of the Public Resources Code, and Section 15386 of Title 14 of the California Code of Regulations. The Department of Fish and Wildlife, 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 (Section 1802 of the Fish and Game Code).

(b) It is therefore the policy of the state to protect, restore, and enhance the functioning of fish, wildlife, and habitat connectivity in connection with the planning, construction, and improvement of transportation infrastructure throughout the state and, where feasible, the operation and maintenance of transportation infrastructure throughout the state.

(c) It is the intent of the Legislature that, in carrying out the policy of the state, the Department of Transportation shall, in consultation with the Department of Fish and Wildlife, consider and, to the maximum extent feasible, incorporate measures for the avoidance, minimization, and mitigation of impacts to wildlife connectivity from the construction, improvement, operation, and maintenance of transportation infrastructure throughout the state.

SEC. 2. Article 3.8 (commencing with Section 158) is added to Chapter 1 of Division 1 of the Streets and Highways Code, to read:

Article 3.8. Barriers to Wildlife Movement

158. For purposes of this article, the following definitions apply:

(a) “Connectivity area” includes any of the following:

(1) An area identified by any federal or state agency that meets the needs for a special status species pursuant to the federal Endangered Species Act of 1973 (16 U.S.C. Sec. 1531 et seq.) or the California Endangered Species Act (Chapter 1.5 (commencing with Section 2050) of Division 3 of the Fish and Game Code).

(2) An area identified by the Department of Fish and Wildlife as important for ecological connectivity for fish or wildlife between natural landscape areas based on consideration of the following factors:

(A) Important landscape linkages identified in regional connectivity studies or habitat protection plans.

(B) Known ungulate migration routes, including those identified in response to the federal Secretarial Order 3362, issued on February 9, 2018, by the federal Secretary of the Interior, and any subsequent updates to the order.

(C) Important movement corridors for sensitive species according to species-specific studies, genetic studies, or published recovery plans.

(D) Known areas of high wildlife mortality due to transportation infrastructure.

(E) Areas where wildlife is known to cross more frequently than other nearby areas, including riparian corridors, canyon bottoms, ridges, or open-space corridors.

(F) Areas where wildlife approach and refuse to cross highways, as identified by wildlife behavior data.

(G) Areas where habitat of adjacent lands is currently in good condition.

(H) Highways with identified barriers where lands adjacent to all approaches to the highway have conservation protections.

(I) Linkages that could facilitate range shifts due to climate change, including areas that connect lower to higher elevations or connect to northern habitats.

(3) An area identified by the department with known or potential transportation barriers to wildlife connectivity, as determined by the department.

(b) “Fish” means fish as defined in Section 45 of the Fish and Game Code.

(c) “Natural landscape area” means a natural, intact habitat area with high ecological integrity that provides core habitat for wildlife and supports native biodiversity.

(d) “Permeability” means the ability of a feature, improvement, or facility to provide for passage of wildlife and improve connectivity to natural landscape areas or other habitat.

(e) “Wildlife” means wildlife as defined in Section 89.5 of the Fish and Game Code.

(f) “Wildlife passage features” means culverts, underpasses, overpasses, bridges, directional fencing, barrier breaks, wildlife monitoring devices or detection systems, elevated highway segments, or other features, supported by a functional or potentially functional ecological buffer of habitat on multiple approaches to a highway that encourage use of the feature and are designed to be managed or restored using the best available science to improve the ability of wildlife to safely traverse transportation infrastructure.

158.1. (a) It is the intent of the Legislature that the department review the full extent of the state highway system, as currently maintained, in consultation with the Department of Fish and Wildlife and with opportunities for the public to provide data input for consideration, to develop a comprehensive approach to address wildlife connectivity needs throughout the state with the goal of implementing measures that protect, conserve, and improve the state’s unique wildlife, landscapes, and natural resources.

(b) In consultation with the Department of Fish and Wildlife and other appropriate agencies, the department shall establish an inventory of connectivity needs on the state highway system where the implementation of wildlife passage features could reduce wildlife-vehicle collisions or enhance wildlife connectivity. In establishing the inventory of connectivity needs, the department, in consultation with the Department of Fish and Wildlife and other appropriate agencies, shall consider all of the following factors:

(1) The ability of wildlife passage features to enhance connectivity and permeability within a connectivity area or natural landscape area.

(2) The logistics surrounding implementation of wildlife passage features, including, but not limited to, all of the following:

(A) The cost effectiveness of implementing wildlife passage features through associated transportation projects.

(B) The ease or capability of facilitating necessary land acquisitions to provide an ecological buffer.

(C) Public support for associated transportation projects.

(D) The ability of wildlife passage features to facilitate continued functional wildlife movement or improved public safety outcomes into the future.

(3) Whether the implementation of wildlife passage features would do any of the following:

(A) Substantially increase climate-resilient wildlife connectivity.

(B) Substantially decrease the likelihood of collisions between wildlife and vehicles.

(C) Contribute to the survival or recovery of any species or population of a species, including, but not limited to:

(i) Species listed as a threatened species or endangered species pursuant to the federal Endangered Species Act of 1973 (16 U.S.C. Sec. 1531 et seq.).

(ii) Species listed as a candidate species, threatened species, or endangered species pursuant to the California Endangered Species Act (Chapter 1.5 (commencing with Section 2050) of Division 3 of the Fish and Game Code).

(iii) Species at risk from highways and habitat fragmentation.

(4) Any other relevant considerations, as determined by the department.

(c) No later than July 1, 2024, the department shall develop and publish, on its internet website, the inventory and a list of funded transportation projects with wildlife passage features that address wildlife connectivity needs. The department shall update the inventory and the project list biennially, at a minimum, and may update the inventory or the list more often, as needed.

158.2. (a) (1) Except as provided in subdivision (b), for any project on the state highway system located in a connectivity area beginning the project initiation phase on or after July 1, 2025, that adds a traffic lane or that has the potential to significantly impair wildlife connectivity for target species in the connectivity area based on criteria developed in collaboration with the Department of Fish and Wildlife, the department shall perform an assessment, in consultation with the Department of Fish and Wildlife, before commencing project design and continuing through the development of the project and into implementation, to identify potential wildlife connectivity barriers and any needs for improved permeability.

(2) As part of the assessment, the department shall consider factors affecting wildlife connectivity that provide scalable solutions for all defined species needs, as determined by the department, in consultation with the Department of Fish and Wildlife.

(3) The assessment may incorporate relevant guidelines and standards in applicable habitat conservation plans approved pursuant to Section 1539 of Title 16 of the United States Code and natural community conservation plans approved pursuant to Chapter 10 (commencing with Section 2800) of Division 3 of the Fish and Game Code.

(4) The department shall submit the assessment to the Department of Fish and Wildlife and, if any structural barrier to wildlife connectivity exists or will be added by the project for target species in the connectivity area based on criteria developed in collaboration with the Department of Fish and Wildlife, the implementing agency shall remediate barriers to wildlife connectivity in conjunction with the project. A project subject to this requirement may incorporate relevant assessments, guidelines, and standards in applicable habitat conservation plans approved pursuant to Section 1539 of Title 16 of the United States Code and natural community conservation plans approved pursuant to Chapter 10 (commencing with Section 2800) of Division 3 of the California Fish and Game Code.

(5) The department shall publish on its internet website a list of all of the transportation projects that require remediation pursuant to paragraph (4) and information regarding whether wildlife passage features are included in those projects or if mitigation credits are applied to the project pursuant

to subdivision (c). The department shall update the project list biennially, at a minimum, and may update the list more often, as needed.

(b) The requirements of subdivision (a) shall apply to the following types of projects only where feasible, practicable, and cost effective, as determined by the department:

(1) Emergency projects.

(2) Safety-focused projects that meet the criteria provided by the State Highway System Management Plan, that would reduce fatal and serious injury collisions on the state highway system, that are included in the highway maintenance program or the State Highway Operation and Protection Program, and that do not add a passing lane, turning lane, or auxiliary lane exceeding one mile in length.

(c) The department may use compensatory mitigation credits approved pursuant to Section 1957 of the Fish and Game Code to satisfy the requirements of this section if the Department of Fish and Wildlife concurs with the use of those credits.

158.3. On or before July 1, 2025, the department shall update appropriate design guidance, including the Highway Design Manual, to incorporate design concepts for wildlife passage features and related standard plans and specifications as appropriate.

158.4. (a) The Transportation Wildlife Connectivity Remediation Program is hereby established to be administered by the department, in consultation with the Department of Fish and Wildlife, for the purposes of improving wildlife connectivity across transportation systems in connectivity areas.

(b) Upon appropriation of funds by the Legislature, the department shall develop a program of projects that support the remediation and improvement of wildlife connectivity across transportation systems, including the state highway system, in accordance with this section.

(c) (1) The department, in concurrence with the Department of Fish and Wildlife, shall develop guidelines for the implementation of the program, following one or more public workshops and an opportunity for the public to provide written comments. The guidelines for the program are exempt from the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code).

(2) The guidelines for the program shall establish selection criteria including the factors set forth in subdivision (b) of Section 158.1 with consideration given to funding wildlife connectivity improvements as standalone projects or funding those improvements on the department's planned projects, including, but not limited to, maintenance and operations projects, to achieve efficiencies in addressing wildlife connectivity needs identified pursuant to subdivision (d).

(d) A project funded by the program shall address a wildlife connectivity need identified in the inventory of connectivity needs for the state highway system established pursuant to Section 158.1 or another documented wildlife connectivity need across transportation infrastructure in a connectivity area.

(e) A project funded by this program may include, but is not limited to, any of the following:

- (1) The placement of exclusion and directional fencing.
- (2) The use of advanced technology to improve the safety of wildlife crossing transportation infrastructure.
- (3) The construction of wildlife-friendly underpasses, overpasses, culverts, and elevated sections of road in key wildlife connectivity areas.

(f) The department may receive compensatory mitigation credits pursuant to Section 1957 of the Fish and Game Code for the implementation of a project in this program if the Department of Fish and Wildlife concurs with the creation of those credits.

158.5. (a) The department shall submit a report to the relevant policy committees and the budget committees of the Legislature, in compliance with Section 9795 of the Government Code, on or before July 1, 2028, on the implementation of this article. The report shall include recommendations for this article and describe the status of the department's progress in doing all of the following:

- (1) Developing an inventory of wildlife connectivity needs on the state highway system pursuant to Section 158.1.
- (2) Assessing transportation projects in connectivity areas for wildlife connectivity impacts pursuant to Section 158.2.
- (3) Implementing wildlife connectivity improvements on transportation projects pursuant to Section 158.2.
- (4) Updating appropriate design guidance, including the Highway Design Manual, to incorporate design concepts for wildlife passage features and related standard plans and specifications pursuant to Section 158.3.
- (5) Implementing the Transportation Wildlife Connectivity Remediation Program pursuant to Section 158.4.
- (6) Funding wildlife connectivity improvements, including total funding amount by fund source for these improvements and a list of improvements that have been funded since the enactment of this article.

(b) The report shall also include information regarding both of the following:

- (1) A description of the consultation and concurrence process between the department, the Department of Fish and Wildlife, and other appropriate entities.
- (2) Significant accomplishments or obstacles to meeting the objectives of the article.

(c) Pursuant to Section 10231.5 of the Government Code, this section shall become inoperative on July 1, 2032, and, as of January 1, 2033, is repealed.