



**The California Department of Fish and Wildlife
Report on Caltrans Advance Mitigation Program**

September 15, 2020

A Report to the Legislature
in compliance with Streets and Highways Code Section 800

EXECUTIVE SUMMARY

Streets and Highways Code Section 800.6 directs the California Department of Fish and Wildlife (CDFW) to submit to the Legislature every two years a report on the California Department of Transportation (Caltrans) Advance Mitigation Program. Specifically, CDFW is to report on the extent to which the Advance Mitigation Program improved the quality and effectiveness of habitat mitigation provided by Caltrans for transportation projects and make related recommendations on how to maximize these attributes. This is CDFW's second biennial report.

Currently, no habitat mitigation specific to the Caltrans Advance Mitigation Program has been completed. However, CDFW reviewed the Program's first-ever draft Regional Advance Mitigation Needs Assessment (RAMNA), for Caltrans District 8. Three additional RAMNAs are currently in preparation and up to 12 Caltrans Districts are expected to have RAMNAs completed within two years. Once finalized, RAMNAs will be used by Caltrans when scoping and justifying advance mitigation investments/projects. Each RAMNA could generate multiple advance mitigation projects that address District-specific mitigation needs. For the Mojave ecoregion, the first advance mitigation project(s) are anticipated to be programmed in the first quarter of fiscal year 2020/2021.

CDFW continues to provide guidance to Caltrans on natural resource related aspects of the Advance Mitigation Program. Based on these interactions and pursuant to statutory direction, CDFW is providing recommendations that will increase the likelihood that forthcoming Caltrans advance mitigation projects will improve the quality and effectiveness of habitat mitigation for future transportation projects. These recommendations include: 1) maximize multi-species and habitat benefits within each advance mitigation project, where feasible; 2) align mitigation across multiple Statewide Advance Mitigation Initiative (SAMI) resource agency members; 3) for impacts to CDFW jurisdictional resources, use existing CDFW programs that can generate advance mitigation; 4) continue to partner with CDFW on emerging concepts currently in development within CDFW programs that are researching new regulatory and administrative pathways to establish advance mitigation credits, including fish and wildlife connectivity; and 5) Consistent with the Caltrans Advance Mitigation Guidelines, after funding and before putting advance mitigation projects out to bid, when appropriate, Caltrans should seek out regional and local resource agency and conservation organization expertise when developing specific advance mitigation projects.

California Department of Fish and Wildlife Report to the Legislature on the Caltrans Advance Mitigation Program

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1. Program Background and Purpose

The Caltrans Advance Mitigation Program (AMP) was formed to meet the requirements of the Road Repair and Accountability Act of 2017 (SB 1 Beall, Ch. 5, Statutes of 2017). The program was amended by SB 103 (Committee on Budget and Fiscal Review), Ch. 95, Statutes of 2017). The Act directs:

- Caltrans to set up a new program for advance mitigation planning and implementing advance mitigation projects¹;
- The Director of Finance to direct the State Controller to deposit no less than \$30 million annually into an Advance Mitigation Account, for implementing advance mitigation projects, commencing with the 2017–18 fiscal year, and for a period of four years;
- Caltrans to operate the Advance Mitigation Account as a self-sustaining revolving account, to manage the total of no less than \$120 million, set aside; and
- Caltrans to protect natural resources through transportation project mitigation and to mitigate, to the maximum extent required by law, environmental impacts from transportation infrastructure projects.

The Act also directs Caltrans to consult with CDFW on all AMP activities (Streets and Highways Code (SHC) 800(a)) and for CDFW and Caltrans to regularly report to the Legislature on the improved quality and effectiveness of Caltrans' AMP habitat mitigation and transportation project acceleration, respectively (SHC 800.6 (f)(g)).

2. CDFW – Past and Current Role

Prior to the July 21, 2017, creation of the formal AMP program through SB 1 and SB 103, CDFW was in constant consultation with Caltrans on advance mitigation topics and provided Caltrans with guidance on conservation goals, objectives, and tools for assessing mitigation conservation values. CDFW is also a signatory to the Statewide Advance Mitigation Initiative (SAMI) Memorandum of Understanding (SAMI MOU 2011; renewed in 2016; amended in 2019), the purpose of which is “to establish a mutual framework for coordinated review concerning development of the Initiative for advance mitigation and conservation planning for planned transportation projects at a landscape scale.”

¹ The Act defines “advance mitigation” as “mitigation implemented before, and in anticipation of, environmental effects of planned transportation improvements (SHC 800.5(c)).

Caltrans' initial advance mitigation efforts were operated out of the State Highway Operations and Protection Program (SHOPP). In 2013, Caltrans entered into a reimbursable agreement with CDFW to fund a liaison to assist with efforts such as developing advance mitigation science and policy; enhancing interagency coordination; and integrating CDFW conservation tools and programs into advance mitigation planning. This report focuses on the formal AMP program created through the Road Repair and Accountability Act of 2017.

Under the formal AMP program, Caltrans finalized its Advance Mitigation Final Formal Guidelines in October of 2019. The program consists of five new major planning steps (Figure 1, taken from the Guidelines), followed by five project delivery steps. The five planning steps are:

Figure 1. Caltrans AMP Steps for the Planning Phase



- 1. Statewide Advance Mitigation Needs Assessment (SAMNA):** The first SAMNA report was published in May 2019. Developed between 2016-2018, the SAMNA is a Geographic Information System (GIS)-based assessment that is performed on future planned state transportation projects that are identified on current long-range transportation plans. These potential footprints are overlaid with natural resource data layers that model species habitat and aquatic resources. Analyses are run on a Caltrans District-wide basis in order to estimate impacts to specific resources within specific ecoregions or watersheds. The Caltrans AMP Guidelines state that the SAMNA will be performed, at a minimum, on a biennial basis.
- 2. Geographic Area of Interest Selection (GAI):** Once an overall estimate of potential compensatory mitigation need is identified for the state through the SAMNA, the AMP, local transportation agencies, and the Caltrans Districts will coordinate to identify geographic areas of interest(s) for Regional Advance Mitigation Needs Assessment (RAMNA) development that will optimize the investment of funds toward meeting AMP goals. GAIs are located where SAMNA results indicate that investing program funds to implement landscape-scale

mitigation in the area is likely to maximize SHOPP and Statewide Transportation Improvement Program (STIP) funded transportation project acceleration in the region while maximizing environmental benefits. GAs are established at watershed or ecoregion scales to assist with appropriate planning areas for mitigation implementation and anticipated use areas that align with resource agency practices.

- 3. Regional Advance Mitigation Needs Assessment (RAMNA):** The RAMNA is a document that builds on the needs identified in the SAMNA for a given GA; it sets the stage for Caltrans to maximize the environmental and conservation benefits from potential advance mitigation actions; and provides Caltrans Districts with enough information to conceptualize advance mitigation projects that can be scoped and submitted to the Caltrans Director for approval. The RAMNA is further informed through two review and information requests: a request of interested parties and the public; and a request of natural resource regulatory agencies that are members of the SAMI.
- 4. Advance Mitigation Project Scoping, Initiation and Nomination Process:** After the RAMNA is finalized, advance mitigation projects will be scoped and initiated by Caltrans Districts using a process similar to transportation projects, but customized and streamlined to fit the unique needs of advance mitigation projects.
- 5. Caltrans Director's Approval:** The Caltrans Director decides, based on the recommendation of the Chief Financial Officer and Chief Engineer, which advance mitigation projects will be funded through the AMP.

The October 2019 Caltrans Advance Mitigation Program Final Formal Guidelines goes into more detail on the steps described above. As of June 2020, the Caltrans AMP is currently on step 3 of the planning phase (RAMNA development) and will likely move into steps 4 and 5 in the first quarter of fiscal year 2020/2021.

3. Advance Mitigation Program - Accomplishments

Since the last CDFW report to the Legislature on July 1, 2018, the following major accomplishments occurred:

- **Biweekly coordination:** CDFW continues to meet with the Caltrans AMP to help inform and guide various aspects of the program's planning and implementation. CDFW Headquarters staff have been actively engaged in the RAMNA process, including suggesting several data sources and providing reviews and comments on several internal Caltrans drafts. When submitted, affected CDFW Regions and Headquarters will provide comments on RAMNAs (see below).

- **Caltrans SAMNA:** The SAMNA report was published in May 2019. The SAMNA will be performed, at a minimum, on a biennial basis. Caltrans will begin the two-year update beginning in June 2020.
- **Caltrans Advance Mitigation Program Final Formal Guidelines:** The Guidelines were finalized in October 2019. This document formalized the AMP processes and procedures within Caltrans.
- **SAMI MOU Amendment:** The first amendment to the MOU was approved by all parties to add the California State Coastal Commission on December 30, 2019. The California Coastal Commission joined CDFW, Caltrans, the Environmental Protection Agency, National Marine Fisheries Service, California State Water Resources Control Board, U.S. Army Corps of Engineers, and U.S. Fish and Wildlife Service as signatories to the SAMI MOU.
- **Master Agreement for Planning and Developing Advance Mitigation throughout California for the California Department of Transportation Advance Mitigation Program (“Process Agreement”):** The Process Agreement was a requirement of the SAMI MOU. It was signed by CDFW on October 8, 2019 and finalized by all parties on January 24, 2020. The Process Agreement established a formalized and mutually agreeable process for implementing advance mitigation projects to meet the Caltrans needs and the conservation priorities and regulatory missions of the other participating agencies.
- **RAMNAs:** Caltrans AMP and District 8 submitted the draft of the program's first RAMNA, “Mojave Desert Section Regional Advance Mitigation Needs Assessment,” to all SAMI agencies and the public on March 10, 2020. CDFW Headquarters and Regions 4, 5, and 6 submitted comments on the RAMNA on May 11, 2020, within the 60-day timeframe outlined in the Process Agreement. CDFW headquarters has also provided informal reviews on the draft District 6 (Fresno) RAMNA and has provided input on information requirements for District 5 (San Luis Obispo) and District 1 (Eureka).
- **CDFW Regional Conservation Investment Strategies Program (RCIS):** Caltrans continues to participate in CDFW's RCIS Program, a program established in 2017 to enable regional conservation strategies and mitigation credit agreements (MCA) that provide advance mitigation credits to Caltrans, other state infrastructure agencies, and other development.
 - Caltrans District 4 (Oakland, CA) wrote a letter of approval for the RCIS Program's first-ever RCIS, the Santa Clara County RCIS, approved by CDFW in November, 2019.
 - Caltrans is a current member of the steering committees for two RCISs in preparation: Santa Cruz County and Monterey County.

- Caltrans is a current member of the technical advisory committees for four RCISs approved or in preparation: Santa Clara County (approved), East Bay (Alameda and Contra Costa counties), Yolo County, and Mid-Sacramento River (Colusa and Sutter counties).
- Caltrans District 4 (Oakland, CA) reviewed and commented on the East Bay RCIS and is anticipated to write a letter of approval prior to its approval by CDFW.

4. Quality and Effectiveness of Habitat Mitigation

The Caltrans AMP is now in the planning phase leading to RAMNA development for its Districts. Once complete, the RAMNAs will form the basis for scoping species and habitat-specific advance mitigation projects within each District. As of June 2020, Caltrans currently has four RAMNAs in preparation, indicated in Table 1 below.

Table 1. Caltrans RAMNAs in Preparation

Caltrans District	Geographic Area of Interest	Public and Agency Review Deadline ¹	Programmed Advance Mitigation Projects ¹
District 8, San Bernardino	Mojave Ecoregion subsection.	May 11, 2020	First Quarter of 2020/2021 Fiscal Year
District 6, Fresno	Great Valley Ecoregion subsection.	October 19, 2020	Third Quarter of 2020/2021 Fiscal Year
District 5, San Luis Obispo	The Central California Coast and Central Valley Coast Range ecoregion sections where they overlap the Central Coastal, Monterey Bay, Pajaro, Salinas, and San Francisco Coastal South watershed subbasins.	First Quarter of 2020/2021 Fiscal Year	Fourth Quarter of 2020/2021 Fiscal Year
District 1, Eureka	Northern California Coast and Northern California Coast Ranges ecoregion sections where they overlap the Mad-Redwood, Lower Eel, and South Fork Eel watershed subbasins.	First Quarter of 2020/2021 Fiscal Year	Fourth Quarter of 2020/2021 Fiscal Year

¹ Documents are in preparation. Non-specific dates are anticipated target dates.

The RAMNAs incorporate several of CDFW's and other resource agencies' statewide and regional conservation plans, objectives, and data resources. CDFW-associated data sources include:

- Climate change resilience and vulnerability assessments
- State Wildlife Action Plan conservation targets
- Statewide and regional habitat connectivity plans
- Areas of Conservation Emphasis (ACE) biodiversity datasets
- Species recovery plans and critical habitat
- Conservation and mitigation banks
- Natural Community Conservation Plans
- Regional Conservation Investment Strategies

In addition to these data sources and plans, RAMNAs also include information from all SAMI partner agencies and local, county, and nongovernmental data sources.

5. Recommendations

CDFW continues to work closely with Caltrans and to provide guidance on CDFW's conservation goals, objectives, and tools to help Caltrans maximize conservation values and meet their regulatory mitigation requirements.

As the Caltrans AMP begins the step of advance mitigation project scoping, creation, and development, CDFW offers the following general recommendations to help maximize the "quality and effectiveness" of the mitigation:

Recommendation 1: Caltrans should seek to maximize multi-species and habitat benefits within each advance mitigation project, where feasible. The Caltrans District RAMNAs identify conservation goals and objectives for selected Caltrans species and habitats for which mitigation is needed. However, the RAMNAs also report on potential impacts to all special-status species and habitats within the region. Caltrans should look for creative ways to scope advance mitigation projects that not only address its specific project mitigation needs, but that also benefit multiple other species, habitats, climate resiliency, and conservation objectives.

Recommendation 2: Caltrans should seek to align mitigation across multiple SAMI resource agency members. Opportunities may exist to meet multiple agency regional goals and objectives within individual advance mitigation projects. This may increase efficiencies within the Caltrans program and be more likely to improve the quality and effectiveness of the resulting mitigation. The SAMI could provide a forum to aid in aligning resource agency mitigation requirements.

Recommendation 3: For impacts to CDFW jurisdictional resources, Caltrans should use the three CDFW programs that can generate advance mitigation opportunities for future transportation projects: Conservation and Mitigation Banking, NCCP, and RCIS and the associated Mitigation Credit Agreements (MCA). Each program considers a regional context and multiple conservation goals and objectives. Approved mitigation from each of those programs has the highest likelihood of being acceptable for future transportation project permits.

Recommendation 4: Caltrans should use MCAs in the RCIS program to establish advance mitigation credits, including fish and wildlife connectivity. While still in development, this program was designed to enable the establishment of mitigation credits from infrastructure projects that improve fish and wildlife habitat or connectivity in excess of what is required for an individual transportation project. CDFW looks forward to continuing to partner with Caltrans on these efforts. Once a crediting system is developed, Caltrans could leverage its considerable engineering expertise and generate mitigation as stand-alone advance mitigation projects or as a part of planned transportation projects.

Recommendation 5: Consistent with the Caltrans Advance Mitigation Guidelines, after funding, and before putting advance mitigation projects out to bid, when appropriate, Caltrans should seek out regional and local resource agency and conservation organization expertise when developing specific advance mitigation projects. Local knowledge and experience may help Caltrans align multiple high-value areas that also meet its mitigation needs.