

2021 Advance Mitigation Program Biennial Report



Report to the Legislature
2021

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Executive Summary

The California Department of Transportation (Caltrans) Advance Mitigation Program was established by the Road Repair and Accountability Act of 2017 (Senate Bill 1, Beall, Chapter 5, Statutes of 2017), and the budget trailer bill Senate Bill 103 (Committee on Budget and Fiscal Review, Chapter 95, Statutes of 2017), to plan and implement advance mitigation solutions for the department's future transportation projects. This new and innovative business practice reduces delays in project delivery by proactively obtaining environmental mitigation in advance of—rather than during—transportation projects.

The program is designed to address longer-term future environmental mitigation needs to improve environmental, economic, and project delivery outcomes. Consolidating forecasted mitigation needs of multiple future transportation projects gives Caltrans the ability to shorten project delivery timelines by providing strategically located and environmentally sound replacement habitat, and shorten project delivery timelines, resulting in both time and cost savings. Ultimately, the program aims to help Caltrans meet both conservation goals and regulatory requirements.

This report is the second biennial report to the Legislature of the Advance Mitigation Program as required by Streets and Highways Code Section 800.6(f). This report covers the time period from January 1, 2019, through December 31, 2020. The purpose of the report is to inform the Legislature on the Advance Mitigation Program's contributions to accelerated delivery of transportation projects.

This report describes the following:

- The statutory authority for the program;
- The state and federal environmental mitigation regulations that the Advance Mitigation Program seeks to satisfy;
- The five-step planning process Caltrans uses for approving the use of Advance Mitigation Account funds;
- The progress in establishing the program.

During the time period this report covers, the program developed the policy, procedures, interagency agreements, and departmental infrastructure necessary to plan and deliver advance mitigation projects. This time period also saw the nomination and scoping of the first advance mitigation project to be funded through the Advance Mitigation Account.

Background

The Advance Mitigation Program is defined in Streets and Highways Code Section 800 et seq. (see Appendix A).

Statutory Reference and Purpose

Streets and Highways Code Section 800.6(f) requires Caltrans to submit a report on the Advance Mitigation Program to the Legislature biennially, commencing with the first report due on July 1, 2019. The law requires the report to include the following:

- The accounting of funds in the Advance Mitigation Account;
- The expected state and federal mitigation requirements for the transportation projects intending to use Advance Mitigation Program mitigation;
- The extent to which these state and federal mitigation requirements were satisfied by Advance Mitigation Program mitigation;
- The Advance Mitigation Account funds that were used in the preparation of Regional Conservation Assessments and Regional Conservation Investment Strategies;
- Recommendations for maximizing the ability of the Advance Mitigation Program to satisfy state and federal mitigation requirements.

This report is the second biennial report. This report covers activity in the Advance Mitigation Program from January 1, 2019, to December 31, 2020. Some information about anticipated accomplishments between January 2021 and July 2021 are also included to provide current information related to the submittal date of the report and are referenced to occur within the Fiscal Year 2020-21. The 2022-23 report will be submitted in 2023 and will cover activity in the Advance Mitigation Program from January 1, 2022, through December 31, 2023.

Program Background

The Advance Mitigation Program was created through the Road Repair and Accountability Act of 2017 (SB 1, Beall, Chapter 5, Statutes of 2017), and the SB 103 (Committee on Budget and Fiscal Review, Chapter 95, Statutes of 2017, Sections 10 – 15). The entire text of the Advance Mitigation Program within Streets and Highways Code can be found in Appendix A. The purpose of the legislation is to:

- Accelerate transportation project delivery;
- Enhance communications between Caltrans and stakeholders to protect natural resources through project mitigation, to meet or exceed applicable environmental requirements, and to mitigate, to the maximum extent required by law, environmental impacts from transportation infrastructure projects;
- Ensure Caltrans consults with the California Department of Fish and Wildlife on all aspects of this program, and to enhance communications with the other natural resource agencies and other stakeholders; and
- Ensure that the Advance Mitigation Account is self-sustaining.

Figure 1: Advance Mitigation Program Goals



The legislation:

- Created the Advance Mitigation Program within the Department of Transportation (Streets and Highways Code Section 800(a));
- Created the Advance Mitigation Account within the State Highway Fund (Streets and Highways Code Section 800(c); 800.7) as a revolving fund that is intended to become self-sustaining (Streets and Highways Code Section 800.7);
- Authorizes the State Controller, upon order from the Director of Finance, to transfer no less than \$30 million annually into the Advance Mitigation Account for four years, commencing with the 2017-18 Fiscal Year, for the planning and implementation of projects in the Advance Mitigation Program (Streets and Highways Code Section 800(b); 800(c)); and
- Restricts the use of mitigation credits or values generated or obtained with the Advance Mitigation Account funds to only transportation projects in the State Transportation Improvement Program and State Highway Operations and Protection Program, and requires these transportation projects to reimburse the Advance Mitigation Account for the expenditures from the account (Streets and Highways Code Section 800(b); 800.6(b); 800.7).

Authorizes Caltrans to allow other transportation agencies to use mitigation credits or values generated or obtained with the Advance Mitigation Account funds on their State Transportation and Improvement Program transportation projects provided that these transportation agencies fully reimburse the Advance Mitigation Account for the full cost of the mitigation credits or values used as determined by Caltrans (Streets and Highways Code Section 800(b); 800.6(b)). The authorized expenditures from the account include:

- Purchasing or funding the purchase of credits from conservation banks, mitigation banks, or in-lieu fee programs approved by one or more regulatory agencies, or establishing or funding the establishment of new conservation banks, mitigation banks, or in-lieu fee programs (Streets and Highways Code Section 800.6(a)(1));
- Paying or funding the payment of mitigation fees or other costs associated with mitigating through Natural Community Conservation Plans and/or Habitat Conservation Plans (Streets and Highways Code Section 800.6(a)(2));
- Preparing or funding the preparation of Regional Conservation Assessments and Regional Conservation Investment Strategies, including entering into Mitigation Credit Agreements (Streets and Highways Code Section 800.6(a)(3)); and
- Performing other mitigation activities, where the above are not feasible, pursuant to a Programmatic Mitigation Plan (Streets and Highways Code Section 800.6(a)(4); 800.9).

Restrictions on Caltrans include:

- A prohibition on spending any funds from the Advance Mitigation Account unless the Caltrans Director makes a determination and justification that the expenditure will likely accelerate the delivery of specific transportation projects (Streets and Highways Code Section 800.6(i); "Caltrans Director's Approval");
- Where Advance Mitigation Program activities occur in areas with existing Natural Community Conservation Plans and/or Habitat Conservation Plans, these activities must be consistent with the Natural Community Conservation Plans and/or Habitat Conservation Plans or any other state or federally approved recovery plan or conservation plan (Streets and Highways Code Section 800.6(d));
- For expenditures not authorized in Streets and Highways Code Sections 800.6(a)(1) - 800.6(a)(3), Caltrans is limited to allocating no more than 25% of the funds in the Advance Mitigation Account during a four-year period (Streets and Highways Code Section 800.6(a)(4)); and
- A provision ensuring that Caltrans will continue to follow California Environmental Quality Act for its transportation projects, which includes the responsibility to avoid and minimize potential impacts to the environment prior to compensating for impacts, and stipulating that the mitigation actions undertaken pursuant to the Advance Mitigation Program do not endorse or imply acceptance of any transportation project alternatives nor its subsequent impacts (Streets and Highways Code Section 800.8).

Reporting requirements include:

- A biennial report to the State Legislature made by Caltrans reporting on the acceleration of transportation project delivery, commencing on July 1, 2019, of which this report is the second ((Streets and Highways Code Section 800.6(f));
- Disclosure to the California Transportation Commission on activity in the Advance Mitigation Account (Streets and Highways Code Section 800.7); and
- A biennial report to the State Legislature made by the California Department of Fish and Wildlife on how the program has improved the quality and effectiveness of habitat mitigation, and makes related recommendations on how to maximize these attributes, with its second report completed on September 15, 2020 (Streets and Highways Code Section 800.6(g)).

See Appendix B for the regulatory context for the program.

History of the Development of the Advance Mitigation Program

In 2008, Caltrans joined a coalition of infrastructure and natural resource agencies, nongovernmental organizations, and academic researchers focused on developing a more comprehensive, holistic approach to mitigating unavoidable biological resource impacts potentially caused by state infrastructure projects, such as roads and levees. This approach, called Regional Advance Mitigation Planning, allows for prioritized natural resources to be protected or restored as compensatory mitigation before infrastructure projects are constructed, often years in advance. In 2009, leadership of the various agencies signed or supported a Memorandum of Understanding including: the California Department of Water Resources, Caltrans, the US Environmental Protection Agency, US Fish and Wildlife Service, US Army Corps of Engineers, the National Oceanic and Atmospheric Administration, National Marine Fisheries Service, California Department of Fish and Wildlife, California Wildlife Conservation Board, Natural Resources Agency, and the California Business, Transportation & Housing Agency. The group defined the goals of advance mitigation, developed planning processes, and initiated a pilot study to inform the development of a number of regional advance mitigation efforts. These also inform the legislative foundation and planning processes of the Advance Mitigation Program.

In 2011, Caltrans signed a Memorandum of Understanding with the California Department of Fish and Wildlife, US Army Corps of Engineers, US Environmental Protection Agency, US Fish and Wildlife Service, National Oceanic and Atmospheric Administration, and National Marine Fisheries Service to establish the Statewide Advance Mitigation Initiative. In the Statewide Advance Mitigation Initiative Memorandum of Understanding, Caltrans and the California Department of Fish and Wildlife agree to work together with the federal regulatory agencies in developing a statewide advance mitigation initiative, including committing staff resources, identifying mitigation locations, and exploring all appropriate compensatory mitigation solutions consistent with applicable laws, regulations, policies, and guidance. The Statewide Advance Mitigation Initiative Memorandum of Understanding provided the basis for establishing an advance mitigation program in the State Highway Operation and Protection Program's Roadside Protection and Restoration Program in 2013, for programming advance mitigation projects in the 2016 State Highway Operation and Protection Program. During 2015, the Advance Mitigation Program within the State Highway Operation and Protection Program became a separate program within the State Highway Operation and Protection Program.

In the 2016 State Highway Operation and Protection Program, three advance mitigation projects totaling \$15.365 million were programmed, with a \$40 million reserve set aside for future projects to be amended in. Nine additional advance mitigation projects were amended in prior to the commencement of the 2018 State Highway Operation and Protection Program, bringing the total programming of advance mitigation projects in this program to \$52.245 million. One advance mitigation project was programmed in the 2018 State Highway Operation and Protection Program; no reserve for advance mitigation was established in the 2018 State Highway Operation and Protection Program.

These advance mitigation projects have served as pilots for informing Caltrans' advance mitigation project delivery processes with a diverse range of mitigation project types. These advance mitigation projects have included the following:

- Buying credits from existing conservation and mitigation banks;
- Buying credits from an existing in-lieu fee program;
- Creating a new conservation bank;
- Contributing funds to a multispecies Habitat Conservation Plan/Natural Community Conservation Plan, performing environmental enhancements on a Caltrans-owned parcel;
- An early attempt to create mitigation credits from building a wildlife undercrossing structure.

Some existing credits have been purchased, and some are already being used by transportation projects with resource agency approval. Caltrans gained lessons learned on contracting, as well as working with the resource agencies and third-party mitigation providers to develop agreements that can accommodate the advance mitigation approach.

After the passage of SB 1 and SB 103, Caltrans established an internal steering committee, an internal work group to establish a schedule and identify the actions necessary to implement the program and integrate it into the Department's existing processes. The group developed a work plan that neared completion by the end of this reporting period, sufficient to enable the nomination, scoping, funding allocation, and delivery of advance mitigation projects funded through the Advance Mitigation Account.

Program Status/Program Accomplishments

The Caltrans Advance Mitigation Program made significant progress during the 2019-2020 reporting period. During this time, Caltrans turned the concepts outlined in its work plan to developing the policy, procedures, interagency agreements, and departmental infrastructure necessary to plan and deliver advance mitigation projects. During this time, Caltrans implemented the planning process in the Mojave Ecoregion in District 8, and Great Valley Ecoregion in District 6, which culminated in the nomination and scoping of the first advance mitigation project to be funded through the Advance Mitigation Account. By the end of Fiscal Year 2020-21, Caltrans District 8 is anticipated to have submitted this project to the Caltrans Director to approve funding of this advance mitigation project, and a second will have been nominated, and funding is anticipated early in Fiscal Year 2021-22. Four additional districts began developing their regional advance mitigation needs assessments during the 2019-2020 reporting period, and an additional six districts will begin theirs early in the next reporting period. This reporting period saw the establishment of the advance mitigation project delivery pipeline, which will be operational and under way in all twelve districts during the next reporting period.

Specific accomplishments during the 2019-2020 reporting period include the following:

- Advance Mitigation Final Formal Guidelines finalized and published;
- Statewide Advance Mitigation Initiative Memorandum of Understanding amended to add the California Coastal Commission as a signatory agency;
- The Master Process Agreement between Caltrans and the Statewide Advance Mitigation Initiative signatory agencies governing the natural resource and regulatory agency participation in Caltrans' Advance Mitigation Program planning process was finalized and signed by all the signatory agencies;
- Implementation of work plan enabled planning, scoping, funding, and delivery of advance mitigation projects from the Advance Mitigation Account;
- Continued biweekly coordination with the California Department of Fish and Wildlife on the Advance Mitigation Program to assist in guiding various planning and implementation aspects of the program;
- Regional Advance Mitigation Needs Assessments and associated agency, public, and interested party public meeting and coordination completed;
- Review and approval of first project initiation proposal to begin advance mitigation project scoping document preparation; and
- The third of four deposits of \$30 million each for Fiscal Year 2019-20 has been made, and interest is accruing on these deposits. The fourth and final deposit is due to be made by the end of the Fiscal Year 2020-21.

Allowable expenditures from the Advance Mitigation Account are defined in Streets and Highways Code Section 800.6(a). No expenditures can be made from the account until the Caltrans Director makes the determination and justification that the expenditure will likely accelerate project delivery of specific transportation projects per Streets and Highways Code Section 800.6(i). The Caltrans Director's determination and justification must be informed and documented. Caltrans has established a five-step planning process to reach that determination as part of the Advance Mitigation Program workplan (Figure 2).

First, a statewide assessment of the estimated potential compensatory mitigation need is performed through the Statewide Advance Mitigation Needs Assessment process. Next, regions or "geographic areas of interest" within a District, are identified that have the potential to provide advance mitigation opportunities. Then, for the geographic area of interest, a regional assessment of opportunities and constraints to meeting the authorized expenditures described above and provide for the best use of Program funds is performed through a process referred to as the Regional Advance Mitigation Needs Assessment. Last, candidate advance mitigation projects are scoped, initiated, and nominated at the District level for possible funding through the Advance Mitigation Account.

Careful planning is a vital and necessary component to the success of the Advance Mitigation Program. The Advance Mitigation Program planning process establishes the authority and justification for expending public funds in accordance with the State Constitution and Streets and Highways Code; provides the basis for consulting with the California Department of Fish and Wildlife and communicating with stakeholders to maximize the conservation benefits of the mitigation; to make wise investments in strategic mitigation projects that meet the mitigation requirements of transportation projects and that subsequently accelerate their delivery; and to recoup the funds to the Advance Mitigation Account from the transportation projects so that the Advance Mitigation Account becomes self-sustaining, as required by statute.

Through the Advance Mitigation Program planning process, Caltrans aims to maximize the environmental and conservation benefits of planned mitigation while providing time- and cost-savings for the delivery of transportation projects. The Advance Mitigation Program planning process consists of five steps culminating in the Caltrans Director's Approval under Streets and Highways Code Section 800.6(i). As none of these planning activities can be funded from the Advance Mitigation Account, the Advance Mitigation Program has worked with the Department's Division of Transportation Planning to secure sufficient planning resources for the Caltrans districts to perform these planning activities, including the nomination and scoping of advance mitigation projects. All twelve Caltrans districts commenced the planning process during the Fiscal Years 2019-20 and 2020-21 and are in different phases of the planning process.

Figure 2. Advance Mitigation Program Planning Phase



Step 1 Status: Statewide Advance Mitigation Needs Assessment

A Statewide Advance Mitigation Needs Assessment was performed based on the *State Highway Operations and Protection Program Ten-Year Project Book for 2017-2018 Fiscal Year (Second Quarter)*. That was completed during December 2018. Since then, the Advance Mitigation Program has:

- Hosted a statewide public webcast on the methods and the final report. The webcast was made publicly available on the Advance Mitigation Program's website;
- Commenced the biennial second run of the Statewide Advance Mitigation Needs Assessment, based on the *State Highway Operations and Protection Program Ten-Year Project Book for the 2019-2020 Fiscal Year (Second Quarter)* and anticipates providing the results to all of the districts by the end of Fiscal Year 2020-21. The overall results of the Statewide Advance Mitigation Needs Assessment provide the basis for the discussion of "Expected Mitigation Requirements" for this Legislative Report and are publicly available on the Advance Mitigation Program's website, as discussed below.

Step 2 Status: Geographic Area of Interest Selection

Identifying and selecting geographic areas of interest is critical to the forward movement of the Advance Mitigation Program. The program has:

- Worked with the Districts and identified Geographic Areas of Interest in Caltrans Districts 1, 5, 6, 7, 8, 11, and 12;
- Held preliminary discussions with three Caltrans Districts 2, 3, and 4 to identify potential geographic area of interests, began during the reporting period but were delayed due to additional efforts needed to coordinate with their regional transportation agency partners. Since the close of the reporting period:
 - Caltrans District 3 finalized their Geographic Area of Interest during the third quarter of the Fiscal Year 2020-21;
 - Caltrans District 4 is anticipated to conclude their coordination and select their Geographic Area of Interest during the fourth quarter of the Fiscal Year 2020-21;
- Discussions with Caltrans Districts 9 and 10 to identify potential Geographic Areas of Interest commenced during the third quarter of Fiscal Year 2020-21; and
- Worked with Division of Transportation Planning to create a process to establish a list of State Transportation Improvement Program-eligible projects included in the fiscally constrained Regional Transportation Plans.

Step 3 Status: Regional Advance Mitigation Needs Assessment

The Regional Advance Mitigation Needs Assessment is a document that builds on the needs identified in the Statewide Advance Mitigation Needs Assessment for a given geographic area of interest and seeks to maximize the environmental and conservation benefits from potential mitigation actions. Caltrans districts have:

- Completed two Regional Advance Mitigation Needs Assessments in:
 - Caltrans District 8: Mojave Desert Ecoregion Section;
 - Caltrans District 6: Great Valley Ecoregion Section;
- Completed two Regional Advance Mitigation Needs Assessment public and agency review processes. These assessments will be finalized during the fourth quarter of the 2020-2021 Fiscal Year in:
 - Caltrans District 1 – Mad-Redwood, Lower Eel and Southfork Eel Sub-Basins;
 - Caltrans District 5: Central Coastal, Monterey Bay, Pajaro, Salinas, and San Francisco Coastal South Sub-Basins;
- Began drafting two Regional Advance Mitigation Needs Assessments in:
 - Caltrans District 11 – San Diego River Sub-Basin;
 - Caltrans District 7 – Southern California Coast and Southern California Mountains and Valleys Eco-Regions Sections;

- Commenced Regional Advance Mitigation Needs Assessments after the close of the reporting period in:
 - Caltrans District 3, which commenced their Regional Advance Mitigation Needs Assessment in the third quarter of the Fiscal Year 2020-21;
 - Caltrans District 4, which is anticipated to commence their Regional Advance Mitigation Needs Assessment in the fourth quarter of Fiscal Year 2020-21.

Step 4 Status: Project Scoping and Initiation

Based on the Regional Advance Mitigation Needs Assessment, Caltrans Districts will identify and scope advance mitigation project alternatives and document how these alternatives will likely accelerate the delivery of transportation projects documented in the Statewide Advance Mitigation Needs Assessment and Regional Advance Mitigation Needs Assessment.

- Caltrans District 8 completed a Project Initiation Proposal to nominate an advance mitigation project and finalized a Project Initiation Document during the reporting period that is anticipated to be approved by the District and submitted for the Director's approval during the fourth quarter of Fiscal Year 2020-21;
- Caltrans District 6 began drafting a Project Initiation Proposal to nominate an advance mitigation project. A Project Initiation Document is anticipated to be finalized in the first quarter of Fiscal Year 2021-22.

Step 5 Status: Caltrans Director's Approval

During the reporting period of this report, no advance mitigation projects have been presented to the Caltrans Director. The Caltrans District 8 advance mitigation project is anticipated to be submitted to the Director for approval for funding in the fourth quarter of Fiscal Year 2021-22.

Advance Mitigation Account

Streets and Highways Code Section 800.6(f)(1) requires reporting on the activity in the Advance Mitigation Account. During the time period covered by this report, the third of the four deposits of \$30 million required per Streets and Highways Code Section 800(b) for 2019-20 was made. The fourth and final deposit is expected to occur by the end of Fiscal Year 2020-21, as required by statute, but had not yet occurred during the reporting period. The Advance Mitigation Account does earn interest from the Surplus Money Investment Account, and as of December 31, 2020, the account had earned \$2,579,085.15 in interest to bring the total amount in the account to \$92,579,085.15 (see Table 1). With the collaboration of the Department of Finance, the State Controller's Office established appropriation procedures for the Capital Outlay Program and all coding structures necessary for disbursing payment from Advance Mitigation Account. During this reporting period, no expenditures have been made from the Advance Mitigation Account.

Table 1 ADVANCE MITIGATION ACCOUNT, STATE TRANSPORTATION FUND (2504) FUND RECONCILIATION as of December 31, 2020				
Account Number	Account Description			
1140	Cash In State Treasury		\$	85.15
1210	Deposits in Surplus Money Investment Fund			
	FY17-18	\$ 30,000,000.00		
	FY18-19	\$ 30,964,000.00		
	FY19-20	\$ 31,148,000.00		
	FY20-21	\$ 467,000.00		\$ 92,579,000.00
A. Total Cash and Deposits				\$ 92,579,085.15
REVENUES AND TRANSFERS				
8000	Income From Surplus Money Investment Fund			
	FY18-19	\$ (964,330.26)		
	FY19-20	\$ (1,443,418.85)		
	FY20-21	\$ (171,336.04)		\$ (2,579,085.15)
9811	Annual Transfers In from State Highway Account Fund (0042)			
	FY17-18	\$ (30,000,000.00)		
	FY18-19	\$ (30,000,000.00)		
	FY19-20	\$ (30,000,000.00)		\$ (90,000,000.00)
B. Total Revenues and Transfers *				\$ (92,579,085.15)
EXPENDITURES				
9030	20.20 Streets and Highways Codesec. 800.7 1835019 - Capital Outlay Projects for purposes of The Advance Mitigation Program Per Ch.95/17 (SB 103) Sec.13			
C. Total Expenditures				\$ -
D. FUND BALANCE Through 12/31/2020 (A-C)				\$ 92,579,085.15
				A+B+C = 0
* Credit journal entry accounts				

Expected Mitigation Requirements

Streets and Highways Code Section 800.6(f)(2) requires this report to include identification of expected state and federal resource and regulatory agency mitigation requirements for transportation projects utilizing the Advance Mitigation Program. During this reporting period, since no advance mitigation projects have begun, there are no transportation projects slated to satisfy their mitigation needs through the Advance Mitigation Program.

As described above, a Statewide Advance Mitigation Needs Assessment was conducted using the *State Highway Operations and Protection Program Ten-Year Project Book for the 2019-2020 Fiscal Year (Second Quarter)*. Of the 2,138 transportation projects in the *State Highway Operations and Protection Program Ten-Year Project Book for the 2019-2020 Fiscal Year (Second Quarter)*, the assessment identified 765 projects statewide that could potentially have footprints that may result in impacts that would require compensatory mitigation. Statewide, the total area of the potential impacts is estimated to be 5,389 acres over the ten-year period. Table 2 presents the estimated potential impacts, distributed across each of the twelve Caltrans districts and broad natural resource types. These numbers represent the full model results of the Statewide Advance Mitigation Needs Assessment and provide a comprehensive and conservative view of potential impacts to all special status species and aquatic resources in the state. Not all of these impacts may require mitigation once a transportation project has completed its environmental studies for actual presence of resources and identified appropriate avoidance and minimization measures, nor may they be deemed to be appropriately mitigated through an advance mitigation project approach.

Natural Resource Type	1	2	3	4	5	6	7	8	9	10	11	12	Total
Special Status Species, general	626.25	553.82	786.66	425.56	684.34	330.17	165.71	983.63	168.50	381.64	127.65	154.60	5388.53
Wetland, general	5.69	8.74	6.45	10.72	6.69	0.80	3.48	0.44	3.62	1.83	1.27	1.29	51.02
Waters, general	18.29	21.01	26.63	11.87	15.34	13.06	4.54	11.48	2.92	15.29	6.56	3.46	150.45

The complete Statewide Advance Mitigation Needs Assessment results can be found here: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/2020-q2-samna-report.pdf>.

The Statewide Advance Mitigation Needs Assessment details the estimated impacts to over 600 special status species and a variety of wetland and other aquatic resources, as well as listing the specific projects utilized in the assessment.

As transportation projects become programmed, go through their CEQA/NEPA process, develop their environmental studies, identify their avoidance and minimization measures, and receive their permits, the specific State and Federal mitigation needs will become more precisely defined. These specifics for the transportation projects will be detailed in this section in future reports.

Mitigation Requirements Satisfied by the Advance Mitigation Program

Streets and Highways Code Section 800.6(f)(3) requires Caltrans to report on the extent to which the expected mitigation needs identified above were satisfied using credits funded through the Advance Mitigation Program. At the conclusion of the reporting period for this report, no advance mitigation projects were funded through the Advance Mitigation Program, and therefore no transportation projects have had their mitigation requirements satisfied through the Advance Mitigation Program.

Future reports will include a list of transportation projects that acquired mitigation credits from the Advance Mitigation Program. For each of these projects, the following information will be provided:

- The total State and Federal mitigation requirements will be identified. This description will include:
 - Specific environmental documents, biological opinions, and permits that these projects have and the mitigation requirements (whether these requirements were satisfied through the Advance Mitigation Program or not);
 - The State or Federal entity issuing the opinions or permits;
 - The specific type of mitigation being required (endangered species habitat, wetlands, etc.) and the amount needed;
- The total amount and type of credits that were acquired from the Advance Mitigation Program;
- A discussion as to whether the Advance Mitigation Program was able to satisfy all the transportation project's mitigation requirements, and the degree to which it accelerated that transportation project's delivery;
- The current preliminary advance mitigation project scopes are being proposed (and are subject to change prior to receiving the Director's approval to be funded from the Advance Mitigation Account). The next report is anticipated to give more up to date information on these and perhaps other advance mitigation projects:
 - District 8: \$7.2 million for 42 desert tortoise credits, 27 ephemeral wash credits, and 1 wetland credit to cover four transportation projects;
 - District 6: \$3.5 million for 14 acres of wetland and non-wetlands waters credits and 42 acres of San Joaquin kit fox, Tipton kangaroo rat, and Fresno kangaroo credits to cover 17 transportation projects.

Regional Conservation Assessments and Regional Conservation Investment Strategies

Streets and Highways Code Section 800.6(f)(4) requires Caltrans to report on the use of Advance Mitigation Account funds to prepare or to fund the preparation of Regional Conservation Assessments and Regional Conservation Investment Strategies. Where a California Department of Fish and Wildlife-approved Regional Conservation and Investment Strategy does not already exist, Caltrans may prepare or fund the preparation of Regional Conservation Investment Strategies in conjunction with Mitigation Credit Agreements using Advance Mitigation Account funds as part of a Caltrans Director-approved advance mitigation project. During this reporting period, no funds have been spent from the account for any purpose, including Regional Conservation Assessment or Regional Conservation Investment Strategy development. Nevertheless, Caltrans has supported the Regional Conservation Investment Strategy program during the reporting period in other ways, including the following:

- Caltrans reviewed and commented on the California Department of Fish and Wildlife's draft Mitigation Credit Agreement guidelines;
- Caltrans currently participates in the technical advisory committees for four Regional Conservation Investment Strategy efforts:
 - Santa Clara County Regional Conservation Investment Strategy;
 - East Bay Regional Conservation Investment Strategy;
 - Yolo Regional Conservation Investment Strategy;
 - Mid-Sacramento Valley Regional Conservation Investment Strategy;
- Caltrans currently participates in the steering committees for two Regional Conservation Investment Strategy efforts:
 - Monterey County;
 - Santa Cruz County;
- Caltrans District 4 provided a letter to the California Department of Fish and Wildlife requesting approval of the East Bay Regional Conservation Investment Strategy per Fish and Game Code Section 1852(a) at the request of the California State Coastal Conservancy;
- Caltrans District 5 provided a letter to the California Department of Fish and Wildlife requesting approval of the Monterey County Regional Conservation Investment Strategy per Fish and Game Code Section 1852(a) at the request of the Transportation Agency of Monterey County;

- Caltrans serves on the Steering Committee for the annual Regional Conservation Investment Strategies Symposium, which is a community of practice organized by The Nature Conservancy and the Conservation Strategy Group; and
- As part of the Advance Mitigation Program's planning process described above, and as described in the Advance Mitigation Program Formal Guidelines, during the Regional Advance Mitigation Needs Assessment development phase, Caltrans will consider all the activities authorized under Streets and Highways Code Section 800.6(a), either as existing opportunities or as concepts moving forward, which include Regional Conservation Investment Strategy development per Streets and Highways Code Section 800.6(a)(3).

Recommendations for Maximizing the Ability of the Advance Mitigation Program to Satisfy State and Federal Mitigation Requirements

Streets and Highways Code Section 800.6(f)(5) requires Caltrans to make recommendations for maximizing the ability of the Advance Mitigation Program to satisfy State and Federal mitigation requirements. Given that the Advance Mitigation Program is in the early stages of its development, a discussion of specific recommendations will be deferred to the next report.

As the Advance Mitigation Program moves forward with implementing advance mitigation projects, Caltrans is focusing on two specific areas of delivery that will benefit from recommendations for improvement. First, Caltrans anticipates developing strategies to maximize the ability of the program to satisfy both State and Federal mitigation requirements with an advance mitigation project scope. Second, Caltrans anticipates identifying ways to accelerate project delivery by meeting several permit requirements simultaneously. Meeting multiple permit requirements may also serve to maximize the conservation benefits within each advance mitigation project. Future reports likely will make specific recommendations on these areas.

Specific progress has been made in updating the various existing mitigation instruments identified in 800.6(a)(1)-(3) so that these instruments can accommodate the advance mitigation approach. Caltrans coordinated with the regulatory agencies that govern the mitigation and conservation banking process to update mitigation banking enabling instrument templates and in-lieu fee enabling instrument templates during the reporting period. This will maximize Caltrans' ability to purchase credits from existing and future banks and in-lieu fee programs by establishing templates and procedures for these pre-permit credit sales and ultimate transfers to satisfy future transportation project permit requirements; although for existing banks and in-lieu fee programs, it is the responsibility and choice of the bank or in-lieu fee program sponsors to amend their instruments to allow for pre-permit credit sales. Additional clarification in the State and Federal mitigation instrument regulations may also be needed.

Further efforts in enabling advance mitigation have involved aligning programmatic solutions with advance mitigation investments. In Caltrans District 8, in parallel to developing the Regional Advance Mitigation Needs Assessment for desert tortoise in the Mojave Desert ecoregion section, the District has negotiated a programmatic biological opinion with USFWS on desert tortoise.

Conclusion and Next Steps

Caltrans worked to integrate the Advance Mitigation Program into the state transportation planning and project delivery system. During the reporting period, Caltrans transitioned from having concepts in the work plan to having fully developed guidance, policy, procedures, interagency agreements and departmental infrastructure necessary to plan, nominate, scope, fund and deliver advance mitigation projects.

Caltrans has one advance mitigation project awaiting district approval. An additional district is scoping one or more advance mitigation projects, anticipated to be submitted for funding approval early in Fiscal Year 2021-22. Four other districts have their Regional Advance Mitigation Needs Assessment being drafted, in various stages of completion. Another six districts are in the process of selecting or reassessing their Geographic Areas of Interest, based on the results of the Second Quarter 2019-20 Fiscal Year run of the Statewide Advance Mitigation Needs Assessment. The third of four annual deposits of \$30 million was made into the Advance Mitigation Account, and the fourth and final deposit will be made by the end of Fiscal Year 2020-21, as required by statute.

The Advance Mitigation Program finalized its Formal Guidelines per AB 115 (Committee on Budget, Chapter 20, Statutes of 2017, Section 25), and:

- Made them publicly available on the Advance Mitigation Program website;
- Finalized an agreement with the Statewide Advance Mitigation Initiative signatory resource agencies for their engagement with the advance mitigation planning and implementation process, with all the agencies signing;
- Continued to perform outreach to the California Transportation Commission, Metropolitan Planning Organizations, Councils of Governments, Regional Transportation Planning Agencies, Regional Advance Mitigation Programs, resource agencies, and conservation groups; and
- Performed the biennial Statewide Advance Mitigation Needs Assessment.

Throughout the development of the Advance Mitigation Program, Caltrans continues to consult with the California Department of Fish and Wildlife.

Looking ahead to the 2023 Advance Mitigation Program Biennial Report, Caltrans anticipates that Regional Advance Mitigation Needs Assessments within each Caltrans district will be completed. Their completion may result in a minimum of five advance mitigation projects being scoped, initiated, nominated, and approved for funds allocation for project delivery from the Advance Mitigation Account.

Appendix A: Statutory Reporting Reference

Streets and Highways Code – SHC

DIVISION 1. STATE HIGHWAYS [50 - 897]

CHAPTER 4. Cooperation By and With the State [760 - 834]

ARTICLE 2.5. Advance Mitigation Program [800 - 800.9]

800. (a) The Advance Mitigation Program is hereby created in the department to enhance communications between the department 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. The department shall consult on all activities pursuant to this article with the Department of Fish and Wildlife, including activities pursuant to Chapter 9 (commencing with Section 1850) of Division 2 of the Fish and Game Code.

(b) Commencing with Fiscal Year 2017–18, and for a period of four years, the department shall set aside no less than thirty million dollars (\$30,000,000) annually for the Advance Mitigation Program from the annual appropriations for the State Highway Operation and Protection Program and the State Transportation Improvement Program for the planning and implementation of projects in the Advance Mitigation Program. Mitigation credits or values generated or obtained with these funds may be used only for transportation improvements in the State Transportation Improvement Program or the State Highway Operation and Protection Program, and may be transferred to another agency, but only upon full reimbursement of the department pursuant to subdivision (b) of Section 800.6.

(c) Upon the order of the Director of Finance, the Controller shall transfer the amount identified for the Advance Mitigation Program in subdivision (b), as determined by the department and the Department of Finance, to the Advance Mitigation Account in the State Transportation Fund.

(d) The annual Budget Act and subsequent legislation may establish additional provisions and requirements for the program.

800.5. For purposes of this article, the following terms have the following meanings:

(a) “Acquire” and “acquisition” mean, with respect to land or a waterway, acquisition of fee title or purchase of a conservation easement that protects conservation and mitigation values on the land or waterway in perpetuity.

(b) “Administrative draft natural community conservation plan” means a substantially complete draft of a natural community conservation plan that is released after January 1, 2016, to the general public, plan participants, and the department.

(c) “Advance mitigation” means mitigation implemented before, and in anticipation of, environmental effects of planned transportation improvements.

- (d) "Commission" means the California Transportation Commission.
- (e) "Conservation easement" means a perpetual conservation easement that complies with Chapter 4 (commencing with Section 815) of Title 2 of Part 2 of Division 2 of the Civil Code.
- (f) "Department" means the Department of Transportation.
- (g) "Mitigation credit agreement" means a mitigation credit agreement pursuant to Chapter 9 (commencing with Section 1850) of Division 2 of the Fish and Game Code.
- (h) "Natural Communities Conservation Plan" means a plan developed pursuant to Chapter 10 (commencing with Section 2800) of Division 3 of the Fish and Game Code.
- (i) "Planned transportation improvement" means a transportation project that a transportation agency has identified in a regional transportation plan, an interregional transportation plan, a capital improvement program, or other approved transportation planning document, excluding any project that is associated with or interacting with the high-speed rail program. A planned transportation improvement may include, but is not limited to, a transportation project that has been planned, programmed, proposed for approval, or that has been approved.
- (j) "Program" means the Advance Mitigation Program implemented pursuant to this article.
- (k) "Regional conservation investment strategy" means a regional conservation investment strategy approved by the Department of Fish and Wildlife pursuant to Chapter 9 (commencing with Section 1850) of Division 2 of the Fish and Game Code.
- (l) "Regulatory agency" means a state or federal natural resource protection agency with regulatory authority over planned transportation improvements. A regulatory agency includes, but is not limited to, the Natural Resources Agency, the Department of Fish and Wildlife, California regional water quality control boards, the United States Fish and Wildlife Service, the National Marine Fisheries Service, the United States Environmental Protection Agency, and the United States Army Corps of Engineers.
- (m) "Transportation agency" means the department, a metropolitan planning organization, a regional transportation planning agency, or another public agency that implements transportation improvements.
- (n) "Transportation improvement" means a transportation capital improvement project.

800.6. (a) The funds in the Advance Mitigation Account created in Section 800.7 shall be used only to do the following:

- (1) Purchase, or fund the purchase of, credits from mitigation banks, conservation banks, or in-lieu fee programs approved by one or more regulatory agencies. The department may also establish mitigation banks, conservation banks, or in-lieu fee programs, or fund the establishment of mitigation banks, conservation banks, or in-lieu

fee programs, in accordance with applicable state and federal standards, if the department determines that those banks or in-lieu fee programs would provide appropriate mitigation of the anticipated potential impacts of planned transportation improvements identified pursuant to Section 800.8.

(2) Pay, or fund the payment of, mitigation fees or other costs or payments associated with coverage for the department's or other transportation agency's projects under natural community conservation plans approved pursuant to Chapter 10 (commencing with Section 2800) of Division 3 of the Fish and Game Code, or habitat conservation plans approved in accordance with the federal Endangered Species Act. The department shall, upon commencement of a regional conservation investment strategy pursuant to paragraph (3), provide written notification thereof to the executive administrative officer of any administrative draft natural community conservation plan, approved natural community conservation plan, or approved regional federal habitat conservation plan that overlaps the proposed area of the regional conservation investment strategy.

(3) Prepare, or fund the preparation of, regional conservation assessments and regional conservation investment strategies. Where a regional conservation investment strategy has been approved by the Department of Fish and Wildlife, the department may do either of the following:

(A) Enter into, or fund the preparation of, mitigation credit agreements with the Department of Fish and Wildlife; purchase credits from an established mitigation credit agreement; or implement, or fund the implementation of, conservation actions and habitat enhancement actions as needed to generate mitigation credits pursuant to those mitigation credit agreements.

(B) Acquire, restore, manage, monitor, enhance, and preserve lands, waterways, aquatic resources, or fisheries, or fund the acquisition, restoration, management, monitoring, enhancement, and preservation of lands, waterways, aquatic resources, or fisheries that would measurably advance a conservation objective in the regional conservation investment strategy if the department concludes that the action or actions could conserve or create environmental values that are appropriate to mitigate the anticipated potential impacts of planned transportation improvements.

(4) Where the advance mitigation mechanisms in paragraphs (1) to (3), inclusive, are not practicable, the department may implement advance mitigation, or fund the implementation of advance mitigation, in accordance with a programmatic mitigation plan pursuant to Section 800.9. No more than 25 percent of the funds in the Advance Mitigation Account may be allocated for this purpose over a four-year period.

(b) The department may use, or allow other transportation agencies to use, mitigation credits or values generated or obtained under the program to fulfill the mitigation requirements of planned transportation improvements if the applicable transportation agency reimburses the program for all costs of purchasing or creating the mitigation credits or values, as determined by the department. Those costs shall be calculated

using total cost accounting and shall include, as applicable, land acquisition or conservation easement costs, monitoring and enforcement costs, restoration costs, transaction costs, administrative costs, contingency costs, and land management, monitoring, and protection costs.

(c) The department shall track all implemented advance mitigation projects to use as credits for environmental mitigation.

(d) Projects or plans prepared pursuant to this section that overlap with any approved natural community conservation plan or approved regional federal habitat conservation plan, shall be consistent with that plan and shall include an explanation of whether and to what extent they are consistent with any overlapping state or federal recovery plan, or other state-approved or federal-approved conservation strategy.

(e) Mitigation credits created pursuant to this section may be used for covered activities under an approved natural community conservation plan only in accordance with the requirements of the plan. Individuals and entities eligible for coverage as a participating special entity under an approved natural community conservation plan may use mitigation credits created pursuant to this section only if the plan's implementing entity declines to extend coverage to the covered activity proposed by the eligible individual or entity.

(f) By July 1, 2019, and biennially thereafter, the department, pursuant to Section 9795 of the Government Code, and notwithstanding Section 10231.5 of the Government Code, shall submit to the Legislature a report that describes to what extent the Advance Mitigation Program has accelerated the delivery of transportation projects. At a minimum, the report shall include the following:

(1) An accounting of the Advance Mitigation Account funds.

(2) Identification of expected state and federal resource and regulatory agency mitigation requirements for transportation projects utilizing the Advance Mitigation Program.

(3) A discussion of the extent to which those requirements are satisfied using advance mitigation credits.

(4) The use of funds to prepare, or to fund the preparation of, regional conservation assessments and regional conservation investment strategies.

(5) Recommendations for maximizing the ability of the Advance Mitigation Program to satisfy state and federal mitigation requirements.

(g) By July 1, 2018, or one year after the initial Advance Mitigation Program investments have begun, whichever is earlier, and biennially thereafter, the Department of Fish and Wildlife shall, pursuant to Section 9795 of the Government Code, and notwithstanding Section 10231.5 of the Government Code, submit a report to the Legislature that describes the extent to which the Advance Mitigation Program has improved the quality and effectiveness of habitat mitigation provided by the department for

transportation projects and makes related recommendations on how to maximize these attributes. The report shall also include recommendations on how to maximize the quality and effectiveness of habitat mitigation developed pursuant to the Advance Mitigation Program.

(h) Nothing in this article shall be construed to impose any restrictions or requirements on the department for activities that do not involve the utilization of Advance Mitigation Account funds. Nothing in this article shall be construed to require the department to use the Advance Mitigation Program.

(i) Prior to making any expenditure from the Advance Mitigation Account, the Director of Transportation shall make a determination and justification that the proposed expenditure is likely to accelerate project delivery of specific projects.

(j) Any state water or transportation infrastructure agency that requests approval of a regional conservation investment strategy pursuant to subdivision (a) of Section 1852 of the Fish and Game Code that may be used to facilitate mitigation for an infrastructure project shall not be subject to the limitation on the number of regional conservation investment strategies set in Section 1861 of the Fish and Game Code.

800.7. The Advance Mitigation Account is hereby created in the State Transportation Fund as a revolving fund. Notwithstanding Section 13340 of the Government Code, the account shall be continuously appropriated without regard to fiscal years for purposes of the Advance Mitigation Program. The activity of the account shall be reported to the commission. The program is intended to become self-sustaining. Expenditures from the account shall later be reimbursed from project funding available at the time a planned transportation project is constructed.

800.8. The program is intended to improve the efficiency and efficacy of mitigation only and is not intended to supplant the requirements of the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resource Code) or any other environmental law. The identification of planned transportation projects and of mitigation projects or measures for planned transportation projects under this article does not imply or require approval of those projects for purposes of the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resource Code) or any other environmental law.

800.9. The department, pursuant to this article and for the purpose of implementing the Advance Mitigation Program, may develop a programmatic mitigation plan pursuant to Section 169 of Title 23 of the United States Code to address the potential environmental impacts of future transportation projects for the purpose of required mitigation approved by federal, state, and local agencies. The programmatic mitigation plans shall include, to the maximum extent practicable, the information required for regional conservation investment strategies.

Appendix B: Regulatory Context of the Program

The term “mitigation” refers to all of the following:

1. Avoiding an environmental impact altogether by not taking a certain action or parts of an action
2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation
3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment
4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and compensating for the impact by replacing or providing substitute resources or environments (40 CFR 1508.20; CEQA Guidelines Section 15370). This case is typically referred to as “compensatory mitigation”

Compensatory mitigation is a mitigation strategy that is preferentially applied only after it has been determined that there will be unavoidable impacts and other efforts to minimize, rectify, and reduce the impact have been incorporated in the transportation project's design and delivery. Traditionally, this determination comes late in the transportation project development process, prompted by natural resource agency permits, at which time the compensatory mitigation action is both funded and implemented concurrently with the transportation project. Advance mitigation shifts this traditional business practice of mitigation planning and implementation to before impacts and permitting occurs and decouples the implementation of the mitigation from the delivery of any one specific transportation project.

Advance mitigation anticipates that unavoidable impacts will be identified in the future. Caltrans identifies and plans for compensatory mitigation sites and implements the mitigation before transportation projects are designed and funded. When mitigation sites are selected independent of transportation project delivery timelines, there exists an opportunity to:

- 1) Consolidate the anticipated mitigation from multiple projects into fewer and larger sites, such that the mitigation provides higher ecological value and is done more efficiently.
- 2) Reduce uncertainty about securing a transportation project's environmental permits, thereby reducing the potential for negative impacts to a transportation project's schedule or costs.

Further, when mitigation is in place prior to actual environmental impacts occurring, there is no temporary loss of biological or ecological functions and values prior to construction, supporting a case for less mitigation for a project's impact (known as lower mitigation ratios). Note that the implementation of advance mitigation is based on estimation of potential needs of future transportation projects, but that this early implementation does not obviate the legal requirements to avoid and minimize the impacts of transportation projects prior to providing compensatory mitigation, nor does the implementation of an advance mitigation action imply endorsement of a particular transportation project alternative.

The legal requirements to provide compensatory mitigation for significant and unavoidable impacts include, but are not limited to:

- California Environmental Quality Act (Public Resource Code Section 21000 et seq.)
- National Environmental Policy Act (NEPA) (42 U.S.C. 4321 et seq.)
- Federal Endangered Species Act of 1973 (16 USC 1531-1543)
- California Endangered Species Act (Fish and Game Code Section 2050 et seq.)
- Federal Clean Water Act, sections 401 and 404 (33 USC 1251-1376)
- Porter-Cologne Water Quality Control Act (California Water Code Section 13000, et seq.)
- California Fish and Game Code, Section 1600 et seq.
- Federal Coastal Zone Management Act of 1972 (16 U.S.C. 1451-1464)
- California Coastal Act of 1976 (Public Resource Code Section 30000 et seq.)
- McAteer-Petris Act (Government Code Sections 66650-66661)

In California, state and federal agencies with jurisdiction over natural resources that could be impacted by transportation projects include, but are not limited to:

- United States Department of Interior, Fish and Wildlife Service
- United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service
- California Department of Fish and Wildlife
- The State Water Resources Control Board

- The United States Army Corps of Engineers
- The California Coastal Commission