BLM EA Template for MMBN – Version 2 (March 20, 2024)

Note to authors:

For a “Final” EA, do not show strikeout of text in the final document. Instead, use text on the document page to indicate where changes have been made, such as “The following paragraph has been added since the draft environmental document was circulated.” Or: “The following sentence has been revised since the draft environmental document was circulated.”

**Standards used in this template:**

Black text = Required headings.

Blue text = Instructions and guidance to be considered and deleted from the final document.

Red text = Required boilerplate text to be inserted into document. This text may be deleted if not applicable, but may not be edited.

Purple text = Sample text that can be used in document, as applicable.

Orange text = Text needing special attention; for example, to distinguish between instructions relating to draft and final environmental document.

Green text = Special guidance for Local Assistance projects (local roadway projects off the State Highway System using Federal-aid funds).

Underlined text (regardless of text color) = Internet or Intranet web links.

To jump to desired sections, use the navigation pane shown on the left of the screen. If the navigation pane is not visible, it can be turned on by marking the “navigation pane” box located under the “View” tab in the “Ribbon” at the top of the screen.

All technical studies should be bound in a separate volume titled:

Environmental Assessment

Volume 2 of 2

Sample Title Sheet – update the information on this page to reflect NEPA lead

FHWA Highway ID No.

10-MER-99-PM 0.0/10.5

415700 [or Federal Aid Number for Local Assistance projects]

1000021137

[Insert short descriptive phrase consistent with project alternative(s) such as “widen” or “improve” or “rehabilitate.”] [For Local Assistance project, “San Luis Obispo Main Street Realignment, located at Main Street”]

# Environmental Assessment

Submitted Pursuant to: (Federal) 42 USC 4332(2)(C)

FEDERAL HIGHWAY ADMINISTRATION

and

The United Stated Department of the Interior

Bureau of Land Management

List any other cooperating agencies here.

Elissa K. Konove

Acting Division Administrator

Federal Highway Administration

NEPA Lead Agency

Date

The following persons may be contacted for more information about this document:

Name, address, and telephone number of Department Contact

If FHWA is NEPA lead: Shawn Oliver is the point of contact for FHWA. He can be reached at 916-390-1714, or by email, at [shawn.oliver@dot.gov](mailto:shawn.oliver@dot.gov).

**INSERT AGENGY LOGOS**

Table of Contents

To update the table of contents (TOC), hover cursor over table and right-click. Choose update field. For topics not needed, or to modify a header (i.e., remove the “if applicable” statements), delete or edit the header in the body of the document and then update the TOC.

[Environmental Assessment i](#_Toc162434611)

[Chapter 1 Proposed Project 1](#_Toc162434612)

[1.1 Introduction 1](#_Toc162434613)

[1.1.1 Independent Utility and Logical Termini 1](#_Toc162434614)

[1.2 Agency Involvement and Decisions to be Made 2](#_Toc162434615)

[1.2.1 Federal Highway Administration (FHWA) 2](#_Toc162434616)

[1.2.2 Bureau of Land Management (BLM) 2](#_Toc162434617)

[1.3 Purpose and Need 2](#_Toc162434618)

[1.3.1 Purpose 2](#_Toc162434619)

[1.3.2 Need 3](#_Toc162434620)

[1.3.3 BLM’s Purpose and Need 3](#_Toc162434621)

[1.4 Project Description 3](#_Toc162434622)

[1.4.1 Design/Construction Elements 4](#_Toc162434623)

[1.5 Project Alternatives 10](#_Toc162434624)

[1.5.1 Build Alternative 10](#_Toc162434625)

[1.5.2 No-Build (No-Action) Alternative 10](#_Toc162434626)

[1.6 BLM Resource Management Plan Conformance 10](#_Toc162434627)

[1.7 Identification of a Preferred Alternative [in final] 11](#_Toc162434628)

[1.8 Standard Measures and Best Management Practices Included in All Build Alternatives 11](#_Toc162434629)

[1.9 Permits and Approvals Needed 11](#_Toc162434630)

[Chapter 2 NEPA Evaluation 13](#_Toc162434631)

[2.1 Environmental Effects 13](#_Toc162434632)

[2.1.1 Coastal Zone 22](#_Toc162434633)

[2.1.2 Wild and Scenic Rivers 23](#_Toc162434634)

[2.1.3 Park and Recreational Facilities 25](#_Toc162434635)

[2.1.4 Farmlands/Timberlands 26](#_Toc162434636)

[2.1.5 Visual/Aesthetics 27](#_Toc162434637)

[2.1.6 Cultural Resources 28](#_Toc162434638)

[2.1.7 Water Quality and Storm Runoff 29](#_Toc162434639)

[2.1.8 Paleontology 31](#_Toc162434640)

[2.1.9 Hazardous Waste/Materials 32](#_Toc162434641)

[2.1.10 Biological Resources 33](#_Toc162434642)

[Chapter 3 Comments and Coordination 36](#_Toc162434643)

[Chapter 4 List of Preparers 41](#_Toc162434644)

[Appendix A Title VI Policy Statement 42](#_Toc162434645)

[Appendix B Comment Letters and Responses 43](#_Toc162434646)

List of Tables

Include a list of tables here. Make sure to update whenever edits are made to table numbers.

Table 2-1 Resource Impacts Summary 20

[List will be corrected when you update the above field (after all tables are entered). Right-click in the gray area and select “Update Field.” To appear in the list, table headings in the document must be tagged DP Table.]

List of Figures

Include a list of figures here. Make sure to update whenever edits are made to figure numbers.

To aid the public in locating maps, it is recommended to clearly show where mapping can be found, particularly for the preferred alternative (if it has been identified).

Figure 1-1 Project Location Map 9

Figure 1-2 District Specific Map 9

[List will be corrected when you update the above field (after all figures are entered). Right-click in the gray area and select “Update Field.” To appear in the list, figure headings in the document must be tagged DP Figure.]

1. Proposed Project
   1. Introduction

In July 2021 Governor Gavin Newsom signed into law Senate Bill (SB) 156 to create an open-access Middle-Mile Broadband Network to bring equitable high-speed broadband service to all Californians. SB 156 provides $3.25 billion to build the necessary infrastructure to bring internet connectivity to homes, businesses, and community institutions. The “middle mile” is the physical fiber optic infrastructure needed to enable internet connectivity. It is made up of high-capacity fiber lines that carry large amounts of data at high speeds over long distances. An open-access network gives providers and entities access to broadband infrastructure that will allow any networks to connect on equal economic and service terms.

The Middle-Mile Broadband Network Initiative aims to bring equitable high-speed broadband service to all Californians by developing the necessary infrastructure to bring internet connectivity to homes, businesses, and community institutions. The “middle mile” is the physical fiber optic infrastructure needed to enable internet connectivity. To achieve the overarching goal of constructing 10,000 miles of middle mile broadband infrastructure, the state of California identified approximately 270 individual broadband installation projects to be implemented through phased planning and construction. Each project would function independently to provide fiber cable infrastructure that serves individual communities, by connecting existing hubs and vaults. Potential users could subsequently connect to middle mile broadband infrastructure by installing “last mile” service, ultimately delivering broadband connectivity to the service area.

* + 1. Independent Utility and Logical Termini

Include a description of the independent utility/logical termini of the individual project using the example below.

The lack of available middle-mile broadband infrastructure has been a major issue in connecting California’s unserved and underserved communities. This project extends along State Route xx from the xx to the xx. Once installed, fiber cable will connect to Hub #xxx at Postmile XX and Hub #xxx at Postmile XX. Vaults will be located at approximately 2,400 feet intervals between hubs. Additional analysis has determined that splice points—where two strands of fiber meet—represent logical termini for projects within the network. The dark fiber between two adjacent splice points is the most granular portion of the network that can be independently operated; accordingly, any project of the network which is bound by a splice point meets the NEPA definition for independent utility. Additionally, the deployment of a splice-to-splice segment on the MMBN would not restrict future improvement or expansion of the network. Simply put, any stretch of fiber between two splice points, which occur every 2.5 miles across the MMBN, could be constructed and operated as a standalone project.

* 1. Agency Involvement and Decisions to be Made
     1. Federal Highway Administration (FHWA)

If at any point the Federal Highway Administration identifies significant impacts, an Environmental Impact Statement will be prepared. If no significant impacts are identified in this Environmental Assessment (EA), the Federal Highway Administration will issue a Finding of No Significant Impact. This NEPA process will help inform FHWA’s decision to issue a Right-of-Way Use Agreement allowing the non-highway use of real property interests in accordance with 23 CFR 710.405.

* + 1. Bureau of Land Management (BLM)

Based on the analysis contained in this Environmental Assessment, the Bureau of Land Management’s responsible official will decide whether to approve, approve with modifications, or deny the right of way grant application (proposed project) as submitted. An executed grant, if the project is approved or approved with modifications, will be issued stating the terms and conditions that must be adhered to for the authorized use, the duration (term limit) of the authorized use, and the public lands that can be occupied for the use. Rights-of-way grant to the applicant the rights to construct, operate, maintain, and terminate the proposed facilities on public land.

* 1. Purpose and Need

The Federal Highway Administration and the Bureau of Land Management operate under separate legal authorities and have distinct roles and responsibilities related to the Middle Mile Broadband initiative, as identified in Section 1.2. Accordingly, each agency has developed its own Purpose and Need Statement to reflect each agency’s respective requirements in regulation and policy. The agencies view the statements as separate but complementary objectives, and as such the alternatives considered in this EA will respond to the project objectives and both below Purpose and Need statements of agencies involved.

* + 1. Purpose

This Middle-Mile Broadband Network (MMBN) project will install the broadband infrastructure along the State Highway System (SHS) and Interstate System necessary to connect to a third-party operated Last Mile Broadband Network which will bring internet connectivity to homes, businesses, and community institutions.

* + 1. Need

The lack of available middle-mile broadband infrastructure has been a major issue in connecting California’s unserved and underserved communities. The statewide open-access middle-mile network included in SB 156 is a foundational investment to ensure every Californian has access to broadband internet service that meets the connectivity needs of today, and well into the future. This project intends to support these communities in providing critical statewide broadband infrastructure to enhance access to and increase the affordability of high-speed internet for all Californians.

* + 1. BLM’s Purpose and Need

In addressing the project goals and objectives and broader needs identified above, the BLM’s need is established by the authorities under the Federal Land Policy and Management Act of 1976, as amended (FLPMA), and associated BLM right-of-way regulations. In accordance with the FLPMA (43 United States Code [USC] Section 1701(a)(7) and Section 1702(c)), public lands and their resources are to be managed for multiple uses that will best meet the present and future needs of the American people, taking into account the long-term needs of future generations for renewable and non-renewable resources, and containing terms and conditions for meeting applicable standards established by law for resources including air and water quality, public health, and safety. The Secretary of the Interior is authorized to grant rights of way on public lands for systems for transmission or reception of radio, television, telephone, telegraph, and other electronic signals, and other means of communication (43 USC Section 1761(a)(5)).

The BLM’s purpose is to provide the State of California the opportunity to construct and maintain broadband infrastructure on public lands administered by the BLM in a manner consistent with applicable laws, regulations, and policies, by responding to the right-of-way application.

* 1. Project Description

Include a description of the individual project, updating sample text to fit your particular project and District.

This project would include the installation of a Middle-Mile Broadband Network (MMBN) along up to 720 miles of the State Highway System (SHS) located with Mono, Inyo and Kern counties in District 9.

The Middle-Mile Broadband Initiative involves an accelerated process for moving projects into construction. Due to the varied topography and locations of the 10,000-mile broadband infrastructure across the State of California, the design would be dependent on project site features and different construction methods would be utilized. Listed below are the anticipated design/construction elements.

* + 1. Design/Construction Elements

Include a description of the project's design and construction elements, updating sample text to fit your particular project and District. If a need for new access roads is determined, then the areas for these roads will require environmental compliance to be completed – this work may require a higher-level document.

Underground Installation

1. The four methods for underground installation of fiber optic conduit are plowing, trenching, trenching in pavement, and horizontal directional drilling. The jack and drill method may be selected as an alternate method to the directional horizontal drilling method. Install three (3) two-inch high-density polyethylene (HDPE) conduits with a minimum of 42 inches clearance underground using the following installation methods:

* Plowing (4 inches wide) – under this method conduits, are installed with the use of a tracked vehicle with cable reel in front and plow blade in back. As the vehicle moves, it furrows the soil and installs the conduit simultaneously.
* Trenching (6 to12 inches wide) – under this method, a trencher with rock-wheel blade or similar is used to cut a trench for conduit installation.
* Trenching in pavement (3 to 6 inches wide and a minimum depth of 2 feet) – under this method, a specialty saw blade is used to cut a narrow trench in asphalt pavement for conduit installation.
* Horizontal directional drilling (8 inches in diameter and minimum depth of 4 feet and maximum depth of 6 feet unless otherwise authorized) – under this method, conduits are installed by digging a trench on each side of the crossing to allow the guiding and retrieval of a drill stem or directional boring device. Other equipment that may be used with this method include drill rig, drill pipe skid, and excavator.
* Jack and drill (8 inches in diameter and minimum depth of 4 feet and maximum depth of 6 feet unless otherwise authorized) – under this method, conduits are installed by excavating an entry pit and an egress pit at either end of the pipe segment. A horizontal auger is used to drill a hole, and a hydraulic jack is used to push a steel casing through the hole to the egress pit. Once the casing is in place, the pipe is installed in the casing.

Conduit will be placed within existing Caltrans rights-of-way (i.e., along right-of-way fence, next to roadway prism, in pavement) with avoidance of sensitive environmental resources and existing utilities as the first priority. Longitudinal installations are prohibited in the highway median.

1. Install vaults (30”x48”x36”) approximately every 2,500 feet (maximum spacing). Every 5th vault will be larger for splicing (48”x48”x48”). Vaults will be flush with the ground or buried.
2. Install cable marker posts located at approximately 1-mile intervals to alert people of the presence of the fiber optic cable. The posts are typically above ground round PVC posts with orange caps. The caps are imprinted with embossed lettering that indicates the presence of fiber optic cable.

Attachment on Structure (Bridge) or Culvert

Fiber optic conduits will be either placed within structure cells, attached underneath the structure, hung underneath the structure, or attached to the barrier on the structure:

1. Install conduit utilizing existing bridge utility openings inside box girder bridges between girders, or existing utility openings in sidewalk(s) or in bridge rail(s).
2. Attach conduit to exterior surface of concrete bridge rail, or soffit of bridge deck overhang.
3. Install conduit under or over culvert or other obstructions.

Above-Ground Installation

1. Aerial installation of conduit on existing poles – fiber is vulnerable to fire, theft, vandalism, animal damage, and exposure to weather. This is the least desired installation method.
2. Aerial installation of conduit on new poles.

Network Hubs

These provide retransmission and reamplify the signal.

* Hub exterior dimensions are 12’x16’x10’, with an approximately 50’ x 50’ fenced area
* Hubs are placed on concrete pads
* Hubs are located a maximum of 50 miles apart; placed to avoid sensitive environmental resources (siting guidance being written)
* Hubs can be located less than 50 miles apart if they are appropriately located
* Hubs to be furnished by the California Department of Technology (CDT) – pad to be constructed by the California Department of Transportation (Caltrans) based on Hub requirements (Note: Turnkey package (racks, table ladders) supplied by CDT and installed by contractor.)
* Hubs to be located in proximity to power hook-up. Backup power to be supplied by generator (propane or diesel) or solar generators will require fuel storage; may require additional potential impacts to environmental resources

Other Footprint Considerations

The following describes staging and storage areas, access roads or other access needs.

1. Conduit, vaults, and fiber will be delivered to the construction site, stored, and staged.
2. The bulk of the construction materials will be stored in warehouses throughout the state and then delivered to the contractor.
3. Staging areas for construction equipment, materials, fuels, lubricants, and solvents will be established along the project routes during construction to allow more efficient use and distribution of materials and equipment. Staging areas are typically locations where materials or equipment are stored for more than two days. Temporary parking areas may also be established to park vehicles and equipment during the workday or overnight. No new staging areas would be established in undisturbed areas. All staging areas will be located on private lands in existing contractor yards; existing commercial areas used for storing and maintaining equipment; previously cleared, graded, or paved areas; or level areas where grading and vegetation clearing are not required. Staging and parking areas are typically selected by the construction contractor, as needed, before and/or during construction. This practice is consistent with construction methods used throughout California and the United States. To ensure that sensitive environmental resources are avoided or adequately protected, the locations of all staging and parking areas would be determined in consultation with qualified biologists and archaeologists. Because fuels, lubricants, and solvents would be stored in staging areas, all staging areas would be located at least 150 feet from sensitive streams/drainages.
4. Access to projects will be by existing access roads. No new access roads are anticipated. If a need for new access roads is determined, then the areas for these roads will require environmental compliance to be completed.

Typical Construction Sequence

* Trench/bore/or place on structure
* Install vaults
* Install conduit
* Backfill – at the end of each day of trenching
* Pull fiber
* Splice fiber

Avoidance of Sensitive Resources

Efforts have been made to design the project routes around sensitive resources and to site repeater stations, directional drilling points, vaults, and other project features in areas that do not support sensitive resources.

Sensitive resources (i.e., biological resources, cultural resources, waters, etc.) will be avoided to the greatest extent feasible through various means identified during the project design phase and identified in the supporting technical documents developed for this project and discussed in Section 2.1. However, there would also be avoidance measures occurring in the field during construction as a result of preconstruction surveys by qualified environmental staff. As required, the construction technique would be coordinated through a resource specialist (i.e., wildlife biologist, wetland ecologist, botanist, archaeologist, cultural resource specialist, tribes, water quality) familiar with the resource issue being avoided.

Include any general avoidance and minimization measures in this section. Please edit this section to fit your project.

Typical project design features include:

* Minor modification of the project routes around the sensitive resource within the disturbed right-of-way,
* Boring under the resource,
* Attaching the fiber optic cable to an existing bridge (in consideration of the historic status of the bridge),
* The locations of all sensitive resources and the methods to avoid them would be shown on the construction drawings,
* All sensitive resources would be staked and flagged in the field and marked on the construction drawings, and
* Monitoring of these areas by biologists, archaeologists, and tribal members may be necessary and required.

Please include resource-specific avoidance and minimization measures that are described in technical studies in this section.

Begin typing here.

Figure 1-1 Project Location Map



Figure 1-2 District Specific Map

Include a map of the segments to be described in this document here.

* 1. Project Alternatives

Include a description of project alternatives in this section.

* + 1. Build Alternative

[Name of build alternative] [Add more headings—for each Build Alternative—as needed]

Include a description here.

* + 1. No-Build (No-Action) Alternative

Include a description here.

* 1. BLM Resource Management Plan Conformance

Consistent with the BLM’s Resource Management Planning regulations at 43 CFR 1610.5(3)(a), all resource management authorizations and actions must conform to the approved Resource Management Planning. All action alternatives considered in this Environmental Assessment conform with goals, objectives, and management direction identified within the applicable resource management plan, the [insert Bureau of Land Management Resource Management Plan name].

Include any specifically applicable Resource Management Planning direction here. These may be obtained from BLM during the kickoff meeting.

* 1. Identification of a Preferred Alternative [in final]

Include a description here.

* 1. Standard Measures and Best Management Practices Included in All Build Alternatives

The following is a list of Standard Measures and Best Management Practices (BMPs) that would be applicable across alternatives. BMPs that are applicable to the alternative chosen will be carried forward into the right-of-way grant stipulations and/or the approved Plan of Development (an instrument of the right-of-way grant once approved). The appropriate BMPs will become terms and conditions of the grant if the application for the proposed project is approved or approved with modifications.

Provide a list of standard measures and Best Management Practices for the project.

* 1. Permits and Approvals Needed

The following permits, licenses, agreements, and certifications (PLACs) are required for project construction:

|  |  |  |
| --- | --- | --- |
| **Agency** | **Permits, Licenses, Agreements, and Certifications** | **Status** |
| U.S. Fish and Wildlife Service (USFWS) | Section 7 Consultation for Threatened and Endangered Species | Request to append project to Programmatic Biological Opinion issued for Middle-Mile Broadband Network projects expected on December 5, 2022. |
| U.S. Army Corps of Engineers | Regional General Permit or Section 404 Permit for filling or dredging waters of the United States | Pre-construction notification for Regional General Permit specific to Middle-Mile Broadband Network projects expected after final environmental document distribution. |
| California Coastal Commission | Coastal Development Permit | Application for Coastal Development Permit expected after final environmental document approval. |
| California Coastal Commission | Federal Coastal Consistency Certification. | Consistency Certification expected after draft environmental document distribution. |
| California Department of Fish and Wildlife | Section 1602 Lake and Streambed Alteration Agreement  Section 2080.1 Agreement for Threatened and Endangered Species | Applications for 1602 permit and Section 2080.1 agreement expected after final environmental document approval. |
| State Water Resources Control Board or Regional Water Quality Control Board | Individual Order Certifying the Corps Regional General Permit | Submittal of Notice of Intent for coverage under Section 401 Individual Order permit expected after final environmental document approval. |
| State Historic Preservation Officer | Memorandum of Agreement | Memorandum of Agreement expected following the circulation of the draft environmental document. State Historic Preservation Officer approved Memorandum of Agreement on \_\_\_\_\_. |
| U.S. Coast Guard | Bridge Permit | Application for Bridge Permit submitted October 3, 2011. |

1. NEPA Evaluation
   1. Environmental Effects

Table 2-1 summarizes potential impacts to various elements of the human environment such as physical, biological, social, and economic factors including the critical elements which are subject to requirements specified in statute, regulation or executive order and must be considered in the Environmental Assessment. This table identifies resources that might be affected by the proposed project. Please see Volume II, Technical Reports, to read more about resources within the project area. A list of technical reports completed for this project is located on the last page of this document.

A “No Effect” determination for resources absent is based on the scope, description, and location of the proposed project as well as the appropriate technical report and is discussed in Table 2-1 Resource Impacts Summary. For resources absent within the project area, no further discussion is warranted in this Environmental Assessment (column marked “No”). If a resource is present in the project area, it should have a corresponding detailed impact analysis under Section 2.1.

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of the proposed project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

The following definition of cumulative impacts under the National Environmental Policy Act (NEPA) can be found in 40 Code of Federal Regulations (CFR) Section 1508.7: Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

To address potential cumulative impacts at a program level, coordination and data reporting on individual projects is being collected statewide by Caltrans’ Headquarters/Division of Environmental Analysis. Before issuing a conclusion regarding cumulative impacts to a resource, this statewide data will be referenced to ensure the decisions made are using the best available data.

**GENERAL GUIDANCE**

If all “No Effect” determinations were made in Table 2-1, delete the Affected Environment, Environmental Consequences and Avoidance, Minimization and/or Mitigation Measures text for the resource.

Based on preliminary analyses that consider the nature of the activities, and the implementation of BMPs, the MMBN has been determined, overall, to be unlikely to impact certain resources. The following checkboxes have been completed in red boilerplate text and should be carried forward as applicable. For the Traffic and Utilities and Environmental Justices/Utilities/Emergency Services resources it is expected that the Districts will include the best management practices as identified for the specific project (in addition to the standard BMPs identified in Section 1.8) within the discussion in the table. Other project-specific BMPs may also be considered, as applicable, and should be detailed in Table 2-1 and in the subsequent sections when incorporated into the project.

* Existing and Future Land Use
* Consistency with State, Regional, and Local Plans and Programs
* Growth
* Community Character and Cohesion
* Environmental Justice/Utilities/Emergency Services (Add BMPs as a result of Temporary Impacts)
* Hydrology and Floodplain
* Traffic and Transportation/Pedestrian and Bicycle Facilities (Add BMPs as a result of Temporary Impacts)
* Geology/Soils/Seismic/ Topography
* Air Quality
* Noise

For project locations with the resource being present (column marked “Yes”) within the project area and potential for impacts to exist, a brief description can be located in Table 2-1 with additional discussion in the section following the table.

For resources identified within the project area, please follow this guidance:

Provide brief discussions (2-3 sentences) in the table with additional discussion in the Affected Environment, Environmental Consequences (*including a discussion on potential Construction Impacts*) and Avoidance, Minimization, and/or Mitigation Measures sections for the resource.

If consultation or coordination has occurred for the resource, discuss that process in the Environmental Consequences section.

In the last column of the table, add a citation to the reference material used to support the finding.

CUMULATIVE IMPACTS GUIDANCE

In addition, please include a brief cumulative discussion paragraph in the Environmental Consequences section that addresses the potential impacts to the discussed resource.

The cumulative impacts data management process is as follows:

* Project teams are required to submit data on project impacts that result in adverse impacts to a resource in an internal living document that is accessible statewide by all District Broadband points of contact/resource subject matter experts on the Broadband SharePoint.
* The data entry on the excel spread sheet must include the following: Identification of the resource, a description of the resource, the resource health, the resource study area, minimization or mitigation measures, and the impact after measures are implemented.
* Teams are also required to upload a corresponding technical report in the Broadband SharePoint.
* Once the spread sheet has been referenced and no cumulative impacts to the resource are anticipated, the document preparer will write a separate memo-to-file documenting these steps and the conclusion. This should be provided with the technical reports in the Attachment to the EA. Additionally, for each resource analyzed in the EA, a succinct statement should be added explaining that cumulative effects are not anticipated. Clear rationale should also be provided explaining the relevant geographic and temporal boundaries identified, reasonably foreseeable projects identified, and describing the analysis completed to come to the conclusion that no cumulative impacts are anticipated.
* If cumulative impacts are realized, a cumulative impact analysis will be required within this document. A meeting with Caltrans Headquarters subject matter experts/Department of Environmental Analysis/Headquarters Environmental Coordinators will be held to further discuss the impacts and the analysis would follow the steps in the Standard Environmental Reference, summarized below.

**Cumulative Impacts Analysis**

In 2005, the Department, in conjunction with the FHWA and U.S. EPA, developed a guidance document entitled [Guidance for Preparers of Cumulative Impact Analysis](https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/other-guidance#cumulative).

The information outlined here summarizes that guidance. Additional guidance can be found at the end of this section.

A cumulative impact analysis, while complex, can be broken down into several steps that will facilitate the overall analysis. Gathering the necessary information about each resource, pulling the needed specifics from the whole, and organizing this into a usable format for the analysis are generally the most time-consuming parts of a cumulative impacts analysis.

Note: It is helpful to keep in mind that an analysis of cumulative impacts looks at the effects on a resource by multiple actions, including the proposed project. This means that a cumulative impact analysis focuses on the resource. The analysis will be easier if you keep asking, “What will happen to the resource?”

Writing the Document

The following eight steps serve as guidelines for identifying and assessing cumulative impacts. Document and discuss each step in the EA.

1. Identify/define the project-specific resources to consider in a cumulative effect analysis. Depending on the project, resources may have different degrees of impacts, ranging from none to significant. List each resource area for which the project could cause direct or indirect impacts. If a project will not cause direct or indirect impacts on a resource, it will not contribute to a cumulative impact on that resource, and need not be further evaluated. Document this conclusion in the environmental document.
2. Define the geographic boundary and temporal boundary or Resource Study Area (RSA) for each resource to be addressed in the cumulative impact analysis. There will be a separate resource study area for each resource, rather than a single study area for all resources combined, and the boundaries of RSAs for cumulative impacts analysis are also often broader than the boundaries used for analyzing the project’s direct impacts.

For more information on determining the correct geographic boundaries associated with an individual resource, refer to the issue paper entitled [*Defining Resource Study Areas*](https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/cumulative-impact-analysis-purpose) in the Guidance for Preparers of Cumulative Impact Analysis.

1. Describe the current health and the historical context of each resource. “Tell the story of the resource.” Describe its current health, condition, or status within the RSA, and provide historical context that explains how the resource got to its current state. Remember that a cumulative impact analysis considers the effects on a resource from past, present, and reasonably foreseeable future actions, combined with the potential impacts of the proposed project. It is not always practical or necessary to provide an exhaustive list of past projects that have affected the resource. Rather, the historical context should identify key historical patterns or a range of activities that have contributed to the current condition of the resource. This historical analysis should not be limited to transportation projects, but rather all types of activities that have contributed to the current condition of the resource. Describe the influence that these patterns or activities have had on the resource and the timeframe in which the notable changes have occurred.
2. Identify the direct and indirect impacts of each of the proposed project alternatives that might contribute to a cumulative impact on the identified resources. If the environmental impacts of the various project alternatives are similar, the discussion of project impacts may be represented by one alternative. If impacts vary substantially between alternatives, describe each alternative’s potential for cumulative impacts.
3. Identify other current and reasonably foreseeable future actions or projects and their associated environmental impacts. Reasonably foreseeable future projects are those that are likely to occur in the future and will add to the cumulative impact on a particular resource. If an impact is permanent and would occur to a resource indefinitely, a time frame of 20 years is recommended for analysis. Again, this discussion should not be limited to transportation projects.

Although there is no uniform established standard, generally, projects will be considered “reasonably foreseeable” if they:

1. Have applications pending with a government agency.
2. Are included in an agency’s budget or capital improvement program.
3. Are foreseeable future phases of existing projects.

Keep in mind that CEQ regulations, as explained in [FHWA guidance](https://www.environment.fhwa.dot.gov/nepa/QAimpact.aspx), require cumulative impact analyses to focus on actions “that are likely or probable, rather than those that are merely possible” (FHWA 2003). For more suggestions about how to gather the information for the analysis, refer to the [Data Gathering Issue Paper](https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/cumulative-impact-analysis-purpose).

1. Assess the potential cumulative impacts. A variety of analysis methods and tools can be used to compile and analyze the data. [Chapter 5 of CEQ’s Considering Cumulative Effects](https://ceq.doe.gov/publications/cumulative_effects.html) describes a variety of methods or tools ranging from preparing a matrix or a map overlay to conducting modeling or trends analysis. Determine for each resource (1) whether there is currently a cumulative impact on the resource in the resource study area; and (2) whether the impacts from your project would contribute to that impact, and if so, at what level.
2. Report the results of the cumulative impact analysis in the environmental document, identifying the RSA, its current health and historical context, project impacts that might contribute to a cumulative impact, other current and reasonably foreseeable actions considered in the cumulative impact analysis, information sources and methodology, and conclusions.
3. Assess the need for avoidance, minimization, and/or mitigation measures and/or recommendations for actions by other agencies to address a cumulative impact. Mitigation for a cumulative impact is often beyond the jurisdiction of the FHWA, the Department, or NEPA cooperating agencies. Successful mitigation measures might require actions by local or regional agencies that have authority for making land use decisions. Therefore, disclosure of mitigation for cumulative impacts is not based on or limited to specific mitigation measures that can be implemented by the lead agency.

If it was not possible to identify a mitigation measure that will be incorporated into the project, list the agencies that have regulatory authority over the resource and recommend actions those agencies could take to influence the sustainability of the resource. For more information about mitigation by others, see CEQ’s discussion of mitigation in [NEPA’s 40 Most Asked Questions](http://ceq.eh.doe.gov/nepa/regs/40/11-19.htm#19), Number 19b.

Additional Guidance

There are many publications in print that can help you with a cumulative impact analysis. The intent of this annotation is to provide a brief, simple explanation of this type of analysis. For more information, please visit and/or obtain any of the following:

* [Guidance for Preparers of Cumulative Impact Analysis](https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/other-guidance#cumulative)
* [Considering Cumulative Effects under the National Environmental Policy Act](https://ceq.doe.gov/publications/cumulative_effects.html). Council on Environmental Quality. January 1997.
* [Guidance on the Consideration of Past Actions in Cumulative Effects Analysis](https://www.energy.gov/nepa/downloads/guidance-consideration-past-actions-cumulative-effects-analysis-ceq-2005). Council on Environmental Quality. June 2005.
* Environmental Protection Agency. [Consideration of Cumulative Impacts in EPA Review of NEPA Documents](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwii2ZXc5oOFAxUVLzQIHQS6DQYQFnoECB0QAQ&url=https%3A%2F%2Fwww.epa.gov%2Fsites%2Fdefault%2Ffiles%2F2014-08%2Fdocuments%2Fcumulative.pdf&usg=AOvVaw0HkT_ERBTEBmMVkgfiFCMF&opi=89978449). U.S. Environmental Protection Agency, Office of Federal Activities. May 1999.
* McCold, L.N. and J.W. Saulsbury. Including Past and Present Impacts in Cumulative Impact Assessments. Environmental Management. Vol. 20 no.5 pp. 767-776. 1996.
* [BLM’s NEPA Handbook H-1790-1- Section 6.8.3 Cumulative Effects](https://www.blm.gov/sites/blm.gov/files/uploads/Media_Library_BLM_Policy_Handbook_h1790-1.pdf). Bureau of Land Management. January 2008.

Table 2-1 Resource Impacts Summary for Build Alternative

| **Resource  Conditions** | **Resource Impacts Anticipated?**  Yes or No | **For Resource Conditions that are Present,  the Following Findings are Made Pursuant to  40 CFR 1508.1(g):**  Include a clear rationale for the determination (such as “The resource is not present in the project area” or “With implementation of BMPs, minor impacts are anticipated”) | **Reference Material Used to Support Finding**  Add technical report, field review, research, etc. to support the conclusions stated here. |
| --- | --- | --- | --- |
| Existing and Future Land Use | No | There is no built environment within Caltrans right of way other than for a transportation use (i.e. highway and freeway use). The installation of broadband conduit, vaults, and hubs parallel with the existing state highway system would have no effect on land use per a review of the general plan and associated land use maps prepared within the project area. |  |
| Consistency with State, Regional, and Local Plans and Programs | No | The installation of broadband conduit, vaults, and hubs parallel with the existing state highway system would have no effect on land use per a review of the general plan and associated land use maps prepared within the project area. |  |
| Coastal Zone |  |  |  |
| Wild and Scenic Rivers |  |  |  |
| Parks and Recreational Facilities |  |  |  |
| Farmlands/ Timberlands |  |  |  |
| Growth/ Community Character and Cohesion | No | The installation of broadband conduit, vaults, and hubs parallel with the existing state highway system would have no effect on growth or community character and cohesion as work is anticipated to occur within Caltrans right-of-way. |  |
| Environmental Justice |  | The proposed project is in compliance with Title VI of the Civil Rights Act of 1964 and Executive Order 12898 Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. It is anticipated that no impacts would occur with the construction and implementation of the Middle-Mile Broadband Network. All work would be contained within the roadway prism. |  |
| Relocations and Real Property Acquisition |  |  |  |
| Utilities/Emergency Services | No | The installation of broadband conduit, vaults, and hubs parallel with the existing state highway system would have no permanent effect on utilities or emergency services. Temporary effects may occur during construction, but they would be minimized by (insert discussion regarding anticipated BMPs that would be implemented prior to and during construction). |  |
| Traffic and Transportation/ Pedestrian and Bicycle Facilities | No | The installation of broadband conduit, vaults, and hubs parallel with the existing state highway system would have no permanent effect on traffic and transportation or pedestrian and bicycle users. Temporary effects may occur during construction, but they would be minimized by (insert discussion regarding anticipated BMPs, such as a Traffic Management Plan that would be implemented prior to and during construction). |  |
| Visual/Aesthetics |  |  |  |
| Cultural Resources, including Tribal interests |  |  |  |
| Hydrology and Floodplain | No | The installation of broadband conduit, vaults, and hubs parallel with the existing state highway system would have no permanent effect on hydrology and floodplain due to nature of the design and would not increase the base flood elevation. |  |
| Water Quality and Storm Water Runoff |  |  |  |
| Geology/Soils/ Seismic/Topography | No | The installation of broadband conduit, vaults, and hubs parallel with the existing state highway system would have no permanent effect on geology, seismology, or the topography due to nature of the design. |  |
| Paleontology |  |  |  |
| Hazardous Waste/Materials |  |  |  |
| Air Quality | No | The installation of broadband conduit, vaults, and hubs parallel with the existing state highway system would have no permanent effect on air quality, as construction of the middle mile network would involve only short-term temporary impacts during construction, additionally the proposed project would not expand the highway use thereby not increasing vehicle use.  In addition, transportation conformity does not apply to the broadband project as it is not considered a transportation project. |  |
| Noise | No | The installation of broadband conduit, vaults, and hubs parallel with the existing state highway system would have no permanent effect on Noise as the project is 1) Not a transportation project 2) would not be considered a type 1 project as the proposed project would not physically alter the existing highway with either a substantial horizontal or vertical alignment. |  |
| Biological Resources |  |  |  |
| Invasive Species |  |  |  |
| Visual Resources, including Wilderness, WSAs, and LWCs |  |  |  |

* + 1. Coastal Zone

Considering the information in the [technical report/memo name] dated [technical report/memo date], the following significance determinations have been made: [Use this statement if there is a technical study or memo, or describe what information the determination is based on]

For “No Effect” determinations, ensure that a clear rationale for the determination (“because” statement) is documented in Table 2-1 above. For determinations other than no effect, keep all sub-headings included below. Include a determination of cumulative impacts for each resource discussed in this section of the document and include the rationale for the determination.

Affected Environment

Begin typing here.

Environmental Consequences

Build Alternative:

Begin typing here.

No Action Alternative:

Begin typing here.

Cumulative Impacts

For any resource with an anticipated effect, please include a cumulative discussion paragraph in the Environmental Consequences section that addresses the potential impacts to the discussed resource and summarize any relevant information in the effects tracker at the time of document preparation. The discussion should include the following verbiage, including the rationale/logic for the determination. For no effect determinations please include the rationale supporting the determination and affirmatively state that because no effects are anticipated, the proposed action would not result in cumulative effects. Sample text provide should be used to develop the rationale.

Construction of the project may result in [impacts - such as minimal temporary impacts] to the [resource]. Avoidance and minimization measures would be included in the project to avoid and/or minimize impacts to the [resource] during construction. As described in [this document and/or or the attached technical report], the project therefore has potential to affect [resource] at the [relevant geographic and temporal scale]. Reasonably foreseeable future projects within this study area include [list projects identified]. Because the project [rationale – such as would result in minimal temporary impacts and would incorporate appropriate avoidance and minimization measures], the project would not contribute to cumulative impacts to the [resource] when combined with other past, present, or reasonably foreseeable future projects.

Begin typing here.

Avoidance, Minimization, and/or Mitigation Measures

In addition to the measures identified in Section 1.8, the below measures will be included in the project as feasible. Begin typing here.

* + 1. Wild and Scenic Rivers

Considering the information in the [technical report/memo name] dated [technical report/memo date], the following significance determinations have been made: [Use this statement if there is a technical study or memo, or describe what information the determination is based on]

For “No Effect” determinations, ensure that a clear rationale for the determination (“because” statement) is documented in Table 2-1 above. For determinations other than no effect, keep all sub-headings included below. Include a determination of cumulative impacts for each resource discussed in this section of the document and include the rationale for the determination.

Affected Environment

Begin typing here.

Environmental Consequences

Build Alternative:

Begin typing here.

No Action Alternative:

Begin typing here.

Cumulative Impacts

For any resource with an anticipated effect, please include a cumulative discussion paragraph in the Environmental Consequences section that addresses the potential impacts to the discussed resource and summarize any relevant information in the effects tracker at the time of document preparation. The discussion should include the following verbiage, including the rationale/logic for the determination. For no effect determinations please include the rationale supporting the determination and affirmatively state that because no effects are anticipated, the proposed action would not result in cumulative effects. Sample text provide should be used to develop the rationale.

Construction of the project may result in [impacts - such as minimal temporary impacts] to the [resource]. Avoidance and minimization measures would be included in the project to avoid and/or minimize impacts to the [resource] during construction. As described in [this document and/or or the attached technical report], the project therefore has potential to affect [resource] at the [relevant geographic and temporal scale]. Reasonably foreseeable future projects within this study area include [list projects identified]. Because the project [rationale – such as would result in minimal temporary impacts and would incorporate appropriate avoidance and minimization measures], the project would not contribute to cumulative impacts to the [resource] when combined with other past, present, or reasonably foreseeable future projects.

Begin typing here.

Avoidance, Minimization, and/or Mitigation Measures

In addition to the measures identified in Section 1.8, the below measures will be included in the project as feasible. Begin typing here.

* + 1. Park and Recreational Facilities

Considering the information in the [technical report/memo name] dated [technical report/memo date], the following significance determinations have been made: [Use this statement if there is a technical study or memo, or describe what information the determination is based on]

For “No Effect” determinations, ensure that a clear rationale for the determination (“because” statement) is documented in Table 2-1 above. For determinations other than no effect, keep all sub-headings included below. Include a determination of cumulative impacts for each resource discussed in this section of the document and include the rationale for the determination.

Affected Environment

Begin typing here.

Environmental Consequences

Build Alternative:

Begin typing here.

No Action Alternative:

Begin typing here.

Cumulative Impacts

For any resource with an anticipated effect, please include a cumulative discussion paragraph in the Environmental Consequences section that addresses the potential impacts to the discussed resource and summarize any relevant information in the effects tracker at the time of document preparation. The discussion should include the following verbiage, including the rationale/logic for the determination. For no effect determinations please include the rationale supporting the determination and affirmatively state that because no effects are anticipated, the proposed action would not result in cumulative effects. Sample text provide should be used to develop the rationale.

Construction of the project may result in [impacts - such as minimal temporary impacts] to the [resource]. Avoidance and minimization measures would be included in the project to avoid and/or minimize impacts to the [resource] during construction. As described in [this document and/or or the attached technical report], the project therefore has potential to affect [resource] at the [relevant geographic and temporal scale]. Reasonably foreseeable future projects within this study area include [list projects identified]. Because the project [rationale – such as would result in minimal temporary impacts and would incorporate appropriate avoidance and minimization measures], the project would not contribute to cumulative impacts to the [resource] when combined with other past, present, or reasonably foreseeable future projects.

Begin typing here.

Avoidance, Minimization, and/or Mitigation Measures

Begin typing here.

* + 1. Farmlands/Timberlands

Considering the information in the [technical report/memo name] dated [technical report/memo date], the following significance determinations have been made: [Use this statement if there is a technical study or memo, or describe what information the determination is based on]

For “No Effect” determinations, ensure that a clear rationale for the determination (“because” statement) is documented in Table 2-1 above. For determinations other than no effect, keep all sub-headings included below. Include a determination of cumulative impacts for each resource discussed in this section of the document and include the rationale for the determination.

Affected Environment

Begin typing here.

Environmental Consequences

Build Alternative:

Begin typing here.

No Action Alternative:

Begin typing here.

Cumulative Impacts

For any resource with an anticipated effect, please include a cumulative discussion paragraph in the Environmental Consequences section that addresses the potential impacts to the discussed resource and summarize any relevant information in the effects tracker at the time of document preparation. The discussion should include the following verbiage, including the rationale/logic for the determination. For no effect determinations please include the rationale supporting the determination and affirmatively state that because no effects are anticipated, the proposed action would not result in cumulative effects. Sample text provide should be used to develop the rationale.

Construction of the project may result in [impacts - such as minimal temporary impacts] to the [resource]. Avoidance and minimization measures would be included in the project to avoid and/or minimize impacts to the [resource] during construction. As described in [this document and/or or the attached technical report], the project therefore has potential to affect [resource] at the [relevant geographic and temporal scale]. Reasonably foreseeable future projects within this study area include [list projects identified]. Because the project [rationale – such as would result in minimal temporary impacts and would incorporate appropriate avoidance and minimization measures], the project would not contribute to cumulative impacts to the [resource] when combined with other past, present, or reasonably foreseeable future projects.

Begin typing here.

Avoidance, Minimization, and/or Mitigation Measures

In addition to the measures identified in Section 1.8, the below measures will be included in the project as feasible. Begin typing here.

* + 1. Visual/Aesthetics

Considering the information in the [technical report/memo name] dated [technical report/memo date], the following significance determinations have been made: [Use this statement if there is a technical study or memo, or describe what information the determination is based on]

For “No Effect” determinations, ensure that a clear rationale for the determination (“because” statement) is documented in Table 2-1 above. For determinations other than no effect, keep all sub-headings included below. Include a determination of cumulative impacts for each resource discussed in this section of the document and include the rationale for the determination.

Affected Environment

Begin typing here.

Environmental Consequences

Build Alternative:

Begin typing here.

No Action Alternative:

Begin typing here.

Cumulative Impacts

For any resource with an anticipated effect, please include a cumulative discussion paragraph in the Environmental Consequences section that addresses the potential impacts to the discussed resource and summarize any relevant information in the effects tracker at the time of document preparation. The discussion should include the following verbiage, including the rationale/logic for the determination. For no effect determinations please include the rationale supporting the determination and affirmatively state that because no effects are anticipated, the proposed action would not result in cumulative effects. Sample text provide should be used to develop the rationale.

Construction of the project may result in [impacts - such as minimal temporary impacts] to the [resource]. Avoidance and minimization measures would be included in the project to avoid and/or minimize impacts to the [resource] during construction. As described in [this document and/or or the attached technical report], the project therefore has potential to affect [resource] at the [relevant geographic and temporal scale]. Reasonably foreseeable future projects within this study area include [list projects identified]. Because the project [rationale – such as would result in minimal temporary impacts and would incorporate appropriate avoidance and minimization measures], the project would not contribute to cumulative impacts to the [resource] when combined with other past, present, or reasonably foreseeable future projects.

Begin typing here.

Avoidance, Minimization, and/or Mitigation Measures

In addition to the measures identified in Section 1.8, the below measures will be included in the project as feasible. Begin typing here.

* + 1. Cultural Resources

Considering the information in the [technical report/memo name] dated [technical report/memo date], the following significance determinations have been made: [Use this statement if there is a technical study or memo, or describe what information the determination is based on]

For “No Effect” determinations, ensure that a clear rationale for the determination (“because” statement) is documented in Table 2-1 above. For determinations other than no effect, keep all sub-headings included below. Include a determination of cumulative impacts for each resource discussed in this section of the document and include the rationale for the determination.

Affected Environment

Begin typing here.

Environmental Consequences

Build Alternative:

Begin typing here.

No Action Alternative:

Begin typing here.

Cumulative Impacts

For any resource with an anticipated effect, please include a cumulative discussion paragraph in the Environmental Consequences section that addresses the potential impacts to the discussed resource and summarize any relevant information in the effects tracker at the time of document preparation. The discussion should include the following verbiage, including the rationale/logic for the determination. For no effect determinations please include the rationale supporting the determination and affirmatively state that because no effects are anticipated, the proposed action would not result in cumulative effects. Sample text provide should be used to develop the rationale.

Construction of the project may result in [impacts - such as minimal temporary impacts] to the [resource]. Avoidance and minimization measures would be included in the project to avoid and/or minimize impacts to the [resource] during construction. As described in [this document and/or or the attached technical report], the project therefore has potential to affect [resource] at the [relevant geographic and temporal scale]. Reasonably foreseeable future projects within this study area include [list projects identified]. Because the project [rationale – such as would result in minimal temporary impacts and would incorporate appropriate avoidance and minimization measures], the project would not contribute to cumulative impacts to the [resource] when combined with other past, present, or reasonably foreseeable future projects.

Begin typing here.

Avoidance, Minimization, and/or Mitigation Measures

In addition to the measures identified in Section 1.8, the below measures will be included in the project as feasible. Begin typing here.

* + 1. Water Quality and Storm Runoff

Considering the information in the [technical report/memo name] dated [technical report/memo date], the following significance determinations have been made: [Use this statement if there is a technical study or memo, or describe what information the determination is based on]

For “No Effect” determinations, ensure that a clear rationale for the determination (“because” statement) is documented in Table 2-1 above. For determinations other than no effect, keep all sub-headings included below. Include a determination of cumulative impacts for each resource discussed in this section of the document and include the rationale for the determination.

Affected Environment

Begin typing here.

Environmental Consequences

Build Alternative:

Begin typing here.

No Action Alternative:

Begin typing here.

Cumulative Impacts

For any resource with an anticipated effect, please include a cumulative discussion paragraph in the Environmental Consequences section that addresses the potential impacts to the discussed resource and summarize any relevant information in the effects tracker at the time of document preparation. The discussion should include the following verbiage, including the rationale/logic for the determination. For no effect determinations please include the rationale supporting the determination and affirmatively state that because no effects are anticipated, the proposed action would not result in cumulative effects. Sample text provide should be used to develop the rationale.

Construction of the project may result in [impacts - such as minimal temporary impacts] to the [resource]. Avoidance and minimization measures would be included in the project to avoid and/or minimize impacts to the [resource] during construction. As described in [this document and/or or the attached technical report], the project therefore has potential to affect [resource] at the [relevant geographic and temporal scale]. Reasonably foreseeable future projects within this study area include [list projects identified]. Because the project [rationale – such as would result in minimal temporary impacts and would incorporate appropriate avoidance and minimization measures], the project would not contribute to cumulative impacts to the [resource] when combined with other past, present, or reasonably foreseeable future projects.

Begin typing here.

Avoidance, Minimization, and/or Mitigation Measures

In addition to the measures identified in Section 1.8, the below measures will be included in the project as feasible. Begin typing here.

* + 1. Paleontology

Considering the information in the [technical report/memo name] dated [technical report/memo date], the following significance determinations have been made: [Use this statement if there is a technical study or memo, or describe what information the determination is based on]

For “No Effect” determinations, ensure that a clear rationale for the determination (“because” statement) is documented in Table 2-1 above. For determinations other than no effect, keep all sub-headings included below. Include a determination of cumulative impacts for each resource discussed in this section of the document and include the rationale for the determination.

Affected Environment

Begin typing here.

Environmental Consequences

Build Alternative:

Begin typing here.

No Action Alternative:

Begin typing here.

Cumulative Impacts

For any resource with an anticipated effect, please include a cumulative discussion paragraph in the Environmental Consequences section that addresses the potential impacts to the discussed resource and summarize any relevant information in the effects tracker at the time of document preparation. The discussion should include the following verbiage, including the rationale/logic for the determination. For no effect determinations please include the rationale supporting the determination and affirmatively state that because no effects are anticipated, the proposed action would not result in cumulative effects. Sample text provide should be used to develop the rationale.

Construction of the project may result in [impacts - such as minimal temporary impacts] to the [resource]. Avoidance and minimization measures would be included in the project to avoid and/or minimize impacts to the [resource] during construction. As described in [this document and/or or the attached technical report], the project therefore has potential to affect [resource] at the [relevant geographic and temporal scale]. Reasonably foreseeable future projects within this study area include [list projects identified]. Because the project [rationale – such as would result in minimal temporary impacts and would incorporate appropriate avoidance and minimization measures], the project would not contribute to cumulative impacts to the [resource] when combined with other past, present, or reasonably foreseeable future projects.

Begin typing here.

Avoidance, Minimization, and/or Mitigation Measures

In addition to the measures identified in Section 1.8, the below measures will be included in the project as feasible. Begin typing here.

* + 1. Hazardous Waste/Materials

Considering the information in the [technical report/memo name] dated [technical report/memo date], the following significance determinations have been made: [Use this statement if there is a technical study or memo, or describe what information the determination is based on]

For “No Effect” determinations, ensure that a clear rationale for the determination (“because” statement) is documented in Table 2-1 above. For determinations other than no effect, keep all sub-headings included below. Include a determination of cumulative impacts for each resource discussed in this section of the document and include the rationale for the determination.

Affected Environment

Begin typing here.

Environmental Consequences

Build Alternative:

Begin typing here.

No Action Alternative:

Begin typing here.

Cumulative Impacts

For any resource with an anticipated effect, please include a cumulative discussion paragraph in the Environmental Consequences section that addresses the potential impacts to the discussed resource and summarize any relevant information in the effects tracker at the time of document preparation. The discussion should include the following verbiage, including the rationale/logic for the determination. For no effect determinations please include the rationale supporting the determination and affirmatively state that because no effects are anticipated, the proposed action would not result in cumulative effects. Sample text provide should be used to develop the rationale.

Construction of the project may result in [impacts - such as minimal temporary impacts] to the [resource]. Avoidance and minimization measures would be included in the project to avoid and/or minimize impacts to the [resource] during construction. As described in [this document and/or or the attached technical report], the project therefore has potential to affect [resource] at the [relevant geographic and temporal scale]. Reasonably foreseeable future projects within this study area include [list projects identified]. Because the project [rationale – such as would result in minimal temporary impacts and would incorporate appropriate avoidance and minimization measures], the project would not contribute to cumulative impacts to the [resource] when combined with other past, present, or reasonably foreseeable future projects.

Begin typing here.

Avoidance, Minimization, and/or Mitigation Measures

In addition to the measures identified in Section 1.8, the below measures will be included in the project as feasible. Begin typing here.

* + 1. Biological Resources

Considering the information in the [technical report/memo name] dated [technical report/memo date], the following significance determinations have been made: [Use this statement if there is a technical study or memo, or describe what information the determination is based on]

For “No Effect” determinations, ensure that a clear rationale for the determination (“because” statement) is documented in Table 2-1 above. For determinations other than no effect, keep all sub-headings included below. Include a determination of cumulative impacts for each resource discussed in this section of the document and include the rationale for the determination.

Affected Environment

Begin typing here.

Environmental Consequences

Build Alternative:

Begin typing here.

No Action Alternative:

Begin typing here.

Cumulative Impacts

For any resource with an anticipated effect, please include a cumulative discussion paragraph in the Environmental Consequences section that addresses the potential impacts to the discussed resource and summarize any relevant information in the effects tracker at the time of document preparation. The discussion should include the following verbiage, including the rationale/logic for the determination. For no effect determinations please include the rationale supporting the determination and affirmatively state that because no effects are anticipated, the proposed action would not result in cumulative effects. Sample text provide should be used to develop the rationale.

Construction of the project may result in [impacts - such as minimal temporary impacts] to the [resource]. Avoidance and minimization measures would be included in the project to avoid and/or minimize impacts to the [resource] during construction. As described in [this document and/or or the attached technical report], the project therefore has potential to affect [resource] at the [relevant geographic and temporal scale]. Reasonably foreseeable future projects within this study area include [list projects identified]. Because the project [rationale – such as would result in minimal temporary impacts and would incorporate appropriate avoidance and minimization measures], the project would not contribute to cumulative impacts to the [resource] when combined with other past, present, or reasonably foreseeable future projects.

Construction of the project would result in minimal temporary impacts to waters of the U.S. Avoidance and minimization measures would be included in the project to avoid and/or minimize impacts to waters of the U.S. during construction. Because the project would result in minimal temporary impacts and would incorporate appropriate avoidance and minimization, the project would not significantly contribute to cumulative impacts to waters of the U.S. when combined with other past, present, or reasonably foreseeable future projects.

Begin typing here.

Avoidance, Minimization, and/or Mitigation Measures

In addition to the measures identified in Section 1.8, the below measures will be included in the project as feasible. Begin typing here.

1. Comments and Coordination

**Regulatory Setting**

Not required.

**GUIDANCE**

**Writing the Document**

1. Documenting Coordination
2. Provide a brief introduction to this chapter (sample text below).

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency and tribal consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including interagency coordination meetings, public meetings, public notices, Project Development Team (PDT) meetings, (continue list as needed). This chapter summarizes the results of the Department’s efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

1. Discuss the scoping process (informal and/or formal).
2. Describe the process, including meeting dates, attendees, issues raised, and comments received.
3. Describe consultation and coordination with public agencies and tribal governments.
4. State which public agencies and tribal governments were contacted during the project’s development. For each entity, do the following:
5. Provide a chronology of all meetings, workshops, hearings, etc. that the agency participated in. If this is an extensive list, it can be a combined list for all agencies and be moved to the back of the chapter.
6. Describe the results of the coordination to date; in other words, document critical decisions. If the agency has taken a position on the project or an issue associated with the project, state the agency’s position.
7. Describe the status of any needed approvals or permits from the agencies.

Note: The level of detail provided for each item above should be commensurate with the controversy and complexity of the project.

1. Include correspondence with agencies (e.g., concurrence letters) at the end of this chapter. Larger approval documents such as the biological opinion, the Memorandum of Agreement (MOA) for cultural resources, Federal Coastal Consistency Certification, and others should be included in the back of the document as appendices.
2. Discuss public participation, including participation by Native American individuals.
3. Describe the public participation methods used for the proposed project. Methods could include PDT participation, citizen advisory committees, mailing lists, newsletters, newspaper notices/articles, public meetings/workshops, and web-based information. Include dates when applicable.
4. Describe the results of the public participation process—number of attendees, comments received, issues raised, and any other pertinent facts. For AB 52, include the number of letters sent and received, issues identified, and solutions/resolutions.
5. If a public hearing or public open house/informational meeting was held, provide the following information:

* Date, time, and location of hearing
* Type of hearing
* Number of attendees
* Number of written comments
* Number of comments taken by court reporter
* Summary of meeting outcome, issues raised, etc.

1. Comments and Responding to Comments

If comments are received on the Draft IS/EA during the public availability period and/or at the public hearing, the Final IS/EA must be modified to reflect all substantive comments and responses to those comments. Substantive comments are those comments that are related to the facts of the project, environmental document, or studies—comments that are purely just expressing support or opposition to the project without any factual substantiation may be acknowledged but do not generally require a response. Comments and responses to comments can either be included in this chapter or as an appendix in the back of the document.

1. A response must be made to all substantive comments received on the “Draft” IS/EA. Options for responding include:
2. Modifying the design of the proposed project and reflecting the modifications in the document.
3. Supplementing, improving, or modifying the analysis in the “Final” IS/EA.
4. Making factual corrections.
5. Explaining why the comments do not require modification to the document and/or proposed project. If this is the case, the response should cite sources, authorities, or reasons that support the Department’s position.
6. If changes are made to the text of the “Final” IS/EA as a result of comments received, those changes must be marked with a line in the margins of the document and the responses to comments should include a reference to the document change.
7. To improve readability, it is recommended that the comment letter and corresponding response(s) be side by side on the same page.
8. “Comment noted” is typically not an appropriate response to a substantive issue. Do not use this as a way to avoid difficult issues. “Comment noted,” is only appropriate when someone has expressed an opinion, such as “I don’t think this project is needed,” or “I support alternative XYZ,” or when there is simply no other response possible. Consider responding “Your support of project ‘X,’ Alternatives 1, 2, and 3 is acknowledged and included in the project record.”

Responses to comments should address the issue or concern of the person who commented and should be based on facts and/or reasoned judgment. In responding to comments, it is often necessary to engage other members of the internal PDT.

1. Remember to deal sensitively with public comments. When responding to comments, keep in mind that the person cared enough about the issue to make a comment, so a good response requires at least as much care.
2. If many comments are received, the comments and responses may be summarized; however, comment letters from elected officials and local, state, and federal agencies and planning groups should always be included in their entirety in the document, along with the responses.
3. For purposes of an IS/EA, comments received after the public availability period and up until the final NEPA decision document (FONSI) should also be addressed and considered.

Additional Guidance

* AASHTO [Practitioners Handbook Responding to Comments](http://www.environment.transportation.org/center/products_programs/practitioners_handbooks.aspx)

**Agency Consultations and Coordination**

**U.S. Army Corps of Engineers**. From March 2022 through July 2023 Caltrans coordinated with staff from the U.S. Army Corps of Engineers during the development of a Regional General Permit (RGP) specific to the MMBN. RGP 23 can be used by MMBN projects that meet eligibility requirements.

Insert description about how RGP 23, or Section 404 permitting, is being obtained for the project, as applicable.

**State Water Resources Control Board.** From March 2022 through August 2023 Caltrans coordinated with staff from the State Water Resources Control Board as part of development of an Order for Waste Discharge Requirements and Clean Water Act Section 401 Water Quality Certification (Order). The Order provides Clean Water Act Section 401 Water Quality Certification for projects that require authorization from the U.S. Army Corps of Engineers under RGP 23 for Project activities involving the discharge of dredged or fill material into waters of the state, including water of the U.S., wetlands, and/or work in or affecting navigable waters of the U.S. The Order applies to MMBN that meet eligibility requirements.

Insert description about how the Order, or separate Section 401 Water Quality Certification, is being obtained for the project, as applicable.

**U.S. Fish and Wildlife Service.** From August 2022 through November 2023 Caltrans conducted consultation with U.S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act. USFWS issued a Programmatic Biological Opinion/Programmatic Letter of Concurrence for MMBN projects in November 2023. Requests to append to the PBO/PLOC can be made for MMBN projects that meet eligibility requirements.

**U.S. Fish and Wildlife Service**. From August 2017 through February 2021 Caltrans conducted consultation with U.S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act. USFWS issued a Biological Opinion regarding the effects on the federally threatened desert tortoise [Mojave population DPS (*Gopherus agassizii*) for highway improvements, maintenance activities, and safety projects in Imperial, Inyo, Kern, Los Angeles, Riverside, San Bernardino, and San Diego Counties, California.

Insert description here about how the MMBN PBO or desert tortoise BO is being utilized for the project. If these Bos won’t be used, delete the above text and identify how the project complies with the federal ESA.

**State Historic Office of Preservation.** As required under the National Historic Preservation Act, the First Amended Section 106 Programmatic Agreement (106 PA) among Federal Highway Administration (FHWA), the Advisory Council of Historic Preservation (ACHP), the State Historic Preservation Officer (SHPO), and the California Department of Transportation became effective January 1, 2014. The First Amended 106 PA has been extended through December 31, 2024 to accommodate for the Second Amended 106 PA, expected to be executed in 2024.

**Tribal Consultation.** If any Tribal consultation was completed (either under Section 106 or government-to-government), insert summary.

1. List of Preparers

The list of preparers should include a list of state and local agency personnel, including consultants, who were primarily responsible for preparing the environmental document and technical studies. Legal counsel who reviewed the document should NOT be included on this list. It is typical to list Department staff first, followed by local agency personnel, and then consultant staff. If the project is not assigned, FHWA personnel would also be included. For more information on the requirements for a List of Preparers, please see [FHWA Technical Advisory T 6640.8A - Guidance for Preparing and Processing Environmental and Section 4(f) Documents, October 30, 1987](http://environment.fhwa.dot.gov/projdev/impta6640.asp).The following provides a sample format that can be used. Typically, staff members are listed alphabetically by last name:

The following Department staff and consultants contributed to the preparation of this EA.

Paul Alfa, Transportation Engineer (NPDES Coordinator).

Sandy Beta, Associate Environmental Planner.

Julia Charlie, Senior Environmental Planner.

John Echo, Associate Environmental Planner.

When a document is primarily prepared by consultant staff, Department staff should include their oversight role. For example:

**Department Staff**

Julia Charlie, Senior Environmental Planner.

Robert Delta, Associate Environmental Planner (Natural Sciences).

**ABC Consulting Firm, Inc.**

Diana Foxtrot, Senior Project Coordinator.

Jackie Golf, Project Biologist.

1. Title VI Policy Statement

Caltrans Title VI Non-Discrimination Policy Statement dated September 2022 and signed by the Caltrans Director. This states: The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of. or be subjected to discrimination under any program or activity receiving federal financial assistance."
Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.
For information or guidance on how to file a complaint, or obtain more information regarding Tile VI, please contact the Title VI Branch Manager at (916) 639-6392 or visit the following web page:
https://ocr.onramp.dot.ca.gov/title-vi-program

[Make sure this is the latest Title VI Policy Statement (pdf) on the SER. Check the date. If you change the image, right-click and add Alt Text to the graphic.]

1. Comment Letters and Responses

[In your final document—add an appendix for Comments and Responses. It won’t necessarily be Appendix B as shown here; placement depends on the number of appendices in your draft and final documents.]

This appendix contains the comments received during the public circulation and comment period from [month day, year] to [month day, year], retyped for readability. The comment letters are stated verbatim as submitted, with acronyms, abbreviations, and any original grammatical or typographical errors included. A response follows each comment presented. Copies of the original comment letters and documents can be found in Volume 2 of this document.

[Retype the individual comments here, followed by individual responses. One comment letter may have multiple comments and responses.]

[Insert images of the letters or comment cards submitted during the public comment period in a document included in Volume 2 Technical Studies Bound Separately. An example is provided showing a comment letter from Calaveras Materials Inc. The actual image of the comment letter shown would be included in Volume 2.]

[Note: It is better to use a page break rather than a section break if you need to start a new comment on a new page. A section break will potentially change your headers and footers since headers and footers must be set for each new section break in Microsoft Word.]

**Comment from Calaveras Materials Inc.**

[Type the entire comment letter in full. Then provide a response to each comment/question, formatted as shown here, keeping the comment/question excerpt as brief as possible.]

**Comment 1:**

There are several landowners upriver from the existing bridge that have expressed an interest in having aggregate removed from their property and processed at the Calaveras Materials Inc. River Rock aggregate processing facility, down river of the bridge. To do this, Calaveras would like to see 17 ft. of clearance under the bridge to facilitate off-road haulage to transport equipment and materials to the processing plant. This clearance would only be necessary for about a 50 ft. wide section under the bridge to allow passage of an off-road haul truck under the bridge.

**Response to comment 1:** Begin typing here.

**Comment 2:**

Traffic safety is of utmost concern to Calaveras Materials Inc. Currently, the existing northbound section of Highway 59, as it exists the existing bridge, immediately enters a banked, sweeping right-hand curve. While the banked curve is wonderful for existing highway traffic entering and exiting the bridge, it is banked exactly opposite to the requirements of a loaded 18-wheel aggregate truck leaving our facility. I would propose that Caltrans use the existing stretch of Highway 59, in front of the Calaveras Materials Inc. entrance gate, as an acceleration lane for trucks to gain speed prior to entering Highway 59, especially southbound.

**Response to comment 2:** Begin typing here.

[This comment letter image would be included in Volume 2 as described above]

Comment letter from Calaveras Materials, Inc. dated April 26, 2004, signed by Terry W. Howard, Area Manager

List of Technical Studies Bound Separately (Volume 2)

Begin typing here. [A sample list is provided below. Note: This list is the last page of your document; it is not an appendix.]

Draft Relocation Statement

Air Quality Report

Noise Study Report

Water Quality Report

Natural Environment Study

Location Hydraulic Study

Historical Property Survey Report

* Historic Resource Evaluation Report
* Historic Architectural Survey Report
* Archaeological Survey Report

Hazardous Waste Reports

* Initial Site Assessment
* Preliminary Site Investigation (Geophysical Survey)

Scenic Resource Evaluation/Visual Assessment

Initial Paleontology Study

To obtain a copy of one or more of these technical studies/reports, please send your request to:

senior planner’s name

District [enter district number] Environmental Division

California Department of Transportation

mailing address, city, state and zip

Or send your request via email to: senior planner’s email address@dot.ca.gov Or call: senior planner’s phone number

Please provide the following information in your request:

Project title:

General location information:

District number-county code-route-post mile:

EA/Project ID number: