**U.S. Army Corps of Engineers, Los Angeles District**

**Section 408 Environmental Assessment Guidelines and Template**

**Introduction**

This document is intended as a guide for preparing an environmental assessment (EA) for a U.S. Army Corp of Engineers (USACE) Los Angeles District Section 408 Permission. Please note that this template is intended as a guide for preparing a “stand-alone” EA. The text in **black** is standard language that we recommend including in the final product. The text in **[red]** should be replaced with project specific information. The text in **[purple]** is explanatory text and should be removed from the final product.

If you have any questions concerning your project with regards to NEPA compliance, or the EA Guidelines and Template please contact Mr. Priyo Majumdar, Senior Project Manager, priyodarshi.majumdar@usace.army.mil.

The following websites and references provide useful information for preparation of NEPA documents:

* 40 CFR Parts 1500-1508: CEQ Regulations for Implementing the Procedural Provisions of NEPA, revised July 16, 2020.

<https://ceq.doe.gov/docs/laws-regulations/nepa-implementing-regulations-desk-reference-2020.pdf>

* 33 CFR Part 230: Corps of Engineers Procedures for Implementing NEPA
* Council on Environmental Quality. 1981. Memorandum to Agencies: Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations.
* Council on Environmental Quality. 2011. Memorandum for Heads of Federal Departments and Agencies: Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact.
* Council on Environmental Quality. 2014. Memorandum for Heads of Federal Departments and Agencies: Effective Use of Programmatic NEPA Reviews.
* Plain Language Action and Information Network. 2011. Federal Plain Language Guidelines.
* U.S. Department of Energy Office of NEPA Policy and Assistance. 2000. Clean Air Act General Conformity Requirements and the National Environmental Policy Act Process.

<https://ceq.doe.gov/guidance/guidance.html>

<https://ceq.doe.gov/laws-regulations/regulations.html>

<https://www.epa.gov/general-conformity>

<https://www.epa.gov/green-book>

Common Pitfalls

The text of an EA for a 408 Permission shall be no more than 45 pages, not including appendices.

Use of the word **“significant”;** keep in mind that in a NEPA document the term has a specific legal meaning. Be very careful in how you use the word significant; ensure that you are using it in the correct context of a NEPA document. We recommend doing a word search for “significant” and carefully considering each use.

Use of the word “**mitigation**” and “**monitoring”**; the term mitigation can be used incorrectly and over-used in NEPA documents. We recommend reviewing the Council on Environmental Quality’s (CEQ) guidance on the appropriate use of mitigation and monitoring (CEQ 2020).

Keep in mind that NEPA and CEQA are two different laws and while the documents may be structurally similar, the wording used in a strictly NEPA document is typically quite different than in a CEQA document.

Copy and pasting from other documents in general. Be sure to proofread your documents to ensure that there are no references to sections, figures or appendices from a different document. While it is ok to re-use information from another document (a biological assessment for example) in your EA, make sure that this information is relevant to the EA and has been thoroughly proof-read.

Use of plain language. Keep the audience in mind. NEPA documents should be written for the general public and need to use plain language. The Federal Plain Language Guidelines are a useful resource for this.

Background, summaries, and existing conditions are often too wordy. Keep information relevant to the 408 action only, and concise.

Including resource evaluations that wouldn’t be affected by the project. While it is ok to list the resources that were considered, but would not be affected, it is not necessary to include long descriptions or evaluations of these resources.

Explaining how the project **will** affect resources instead of how the project **would** affect resources. The use of “**will**” can be interpreted as pre-decisional, it is more appropriate to use the word “**would**”.

**ENVIRONMENTAL ASSESSMENT**

**for the**

**[408-SPL-20XX-00X]**

**[USACE AUTHORIZED PROJECT NAME]**

[Don’t add any text such as Name, Title of Requester]

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**APPENDICES**

[The appendices should contain information that support the analyses presented in the main body of the EA. Common appendices include air pollutant emissions analyses, records of Section 7 Endangered Species Consultation, Section 106 National Historic Preservation Act consultation, tribal consultations, public notice, comments received in response to public notice and USACE’s response to comments. Do not include cultural reports.]

**LIST OF TABLES**

[Tables should be included as appropriate. Common information to be included as a table may include special status species present in the proposed project area, air quality data, etc. Tables should be placed in-text as close to their first citation as possible. The list of tables should be formatted using the same style as the table of contents.]

**LIST OF FIGURES**

[All EAs should include maps showing the vicinity and location of the proposed action. Other common figures include site photographs, habitat type maps, relevant plans and drawings, maps of construction or project elements, maps showing the geographic analysis areas for affected resources (e.g., a map showing the watershed that may be affected by the proposed action), etc. Figures should be placed in-text as close to their first citation as possible. The list of figures should be formatted using the same style as the table of contents.]

# List of Acronyms and Abbreviations

[Provide a list of all of the acronyms and abbreviations used in the document. Please go through the document carefully (doing a search on parentheses can be effective) to locate. Additionally, please ensure that acronyms and abbreviations are introduced only once, and at the very first use, in the document. This is a very common pitfall in NEPA documents.]

|  |  |
| --- | --- |
| [Acronym] | [Long Version] |

|  |  |
| --- | --- |
|  |  |
| BMPs  | Best Management Practices  |
| CO  | Carbon Monoxide  |
| CO2  | Carbon Dioxide  |
| CEQ  | Council on Environmental Quality  |
| CFR  | Code of Federal Regulations  |
| EA  | Environmental Assessment  |
| EC  | Engineering Circular  |
| E.O.  | Executive Order  |
| ER  | Engineering Regulation  |
| NAAQS  | National Ambient Air Quality Standards  |
| NEPA  | National Environmental Policy Act  |
| NO2  | Nitrogen Dioxide  |
| O&M  | Operation and Maintenance  |
| O3  | Ozone  |
| PM  | Particulate Matter  |
| SIP  | State Implementation Plan  |
| SO2  | Sulfur Dioxide  |
| TIP  | Tribal Implementation Plan  |
| USACE  | United States Army Corps of Engineers  |
| U.S.C.  | United States Code  |
| USEPA  | United States Environmental Protection Agency  |
| USFWS  | United States Fish and Wildlife Service  |

# 1.0. PURPOSE AND NEED

## 1.1. Introduction

[Introduce the action that is triggering assessment under NEPA; this will typically be the request for a Section 408 Permission. Recommended language is included below.]

In compliance with section 14 of the Rivers and Harbors Act of 1899, as amended, codified at 33 U.S.C 408 (Section 408), [Name non-federal sponsor] (Requester) has requested permission from the U.S. Army Corps of Engineers (USACE) to alter the [Name of Federal project], an existing federal [flood risk management, restoration, navigation, dam, reservoir)] project, authorized by [citation to original authorizing statute, for example Flood Control Act of 1917].

In order to address the potential environmental impacts of the proposed action, as required under the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321 *et seq.*), this Environmental Assessment (EA) has been prepared consistent with the Council on Environmental Quality’s (CEQ) NEPA regulations at 40 CFR 1500-1508, USACE regulations implementing NEPA at 33 CFR Part 230, USACE Engineer Regulation (ER) 200-2-2, and Engineer Circular (EC) 1165-2-220.

This EA has been prepared by [non-federal sponsor’s name] on behalf of the USACE and has been independently reviewed by USACE staff. The scope of the document, methods of analysis, and conclusions represent the independent judgment of the USACE. Staff members from the USACE and others who helped prepare this EA are identified in Section 5.0, List of Preparers and Reviewers.

## 1.2. 33 U.S.C. Section 408 Authority and Guidance

The authority to grant permission for temporary or permanent use, occupation or alteration of any USACE federally authorized civil works project is contained in Section 408. Section 408 authorizes the Secretary of the Army, on the recommendation of the Chief of Engineers, to grant permission for the alteration or occupation or use of a USACE project if the Secretary determines that the activity will not be injurious to the public interest and will not impair the usefulness of the project. An alteration is “any action by any entity other than USACE that builds upon, alters, improves, moves, occupies, or otherwise affects the usefulness, or the structural or ecological integrity, of a USACE project. Section 408 authority only applies to alterations proposed within the lands and real property interests identified and acquired for the USACE project and to lands available for USACE projects under the navigation servitude. According to EC 1165-2-220, maintenance and repair activities conducted by non-federal sponsors on the USACE project for which they have operation and maintenance responsibilities do not require Section 408 Permission but may require coordination or concurrence from the USACE district. The Secretary of Army’s authority under Section 408 has been delegated to the USACE Chief of Engineers. The USACE Chief of Engineers has further delegated the authority to the USACE Directorate of Civil Works, Division and District Engineers, and authorized District Engineers to further re-delegate the authority to Supervisory Division Chiefs depending upon the nature of the activity.

In EC 1165-2-220, USACE has issued policy and guidance for processing Section 408 requests. EC 1165-2-220 clarifies that a decision on a Section 408 Permission is a federal action, and therefore subject to NEPA and other environmental compliance requirements.

## 1.3. Purpose of and Need for Action

[The purpose of and need for action provides the foundation for the EA and the decision-making process; this section should summarize the need for action and list the project objectives (purpose) for the 408 action only, i.e. the action that is occurring within the flood control right of way, and stockpile area, staging area, and access road. This section should provide the information that establishes the scope of the alternatives. The need should use objective facts to describe the on-the-ground conditions leading the requester/project proponent to propose action(s) within the project area.

We recommend that the **Purpose** and **Need** be kept conceptually separate, describe the need for the action and then describe the purpose of the action.

Include reference to a vicinity and location map in this section. Specific site information should be saved for the affected environment sections, but enough information should be provided here (best provided using a map or maps) for information on the general location where the action is proposed. The location map(s) should include enough major landmarks (roads, towns, county boundaries, etc.) that a reader unfamiliar with the area could locate the proposed action area.]

Be careful not to simply list the proposed project actions as the purpose.

Example 1:

An inappropriate purpose would be to “install a 2000-foot long steel storm drain pipeline from the LA River to the north side of field 3A.” A more appropriate purpose would be “provide irrigation to the north side of field 3A.” A sound purpose should allow for different options/alternatives to achieve the objective.

Example 2:

The purpose of the action is to redirect flow from an existing 10-inch sewer, service the existing state prison, and accommodate future flows from several proposed developments (private, State and County), and the newly constructed XXXX Parkway. The action is needed to facilitate an increase in capacity for the sewer transmission pipe as development occurs because the existing sewer system is not adequate to support demands with proposed development.

## 1.4. BACKGROUND INFORMATION

[Optional Section) only include if there is relevant background information that cannot be described elsewhere. Be sure that any background information included is relevant to the EA analysis, avoid cutting and pasting large quantities of information from other documents. Remember, it is not an essay writing competition]

## 1.5. Scope of the Decision to be Made

[Summarize the decision to be made: issue (action) or deny (no action) a Section 408 Permission for the proposed action.]

## 1.6. Scoping and Issues

[Summarize the public notice completed by USACE (see recommended language in black and red text below). This section should provide a summary, the full scoping record should be included as an appendix. The scoping record should include the public notice posted by USACE, any responses to this public notice that USACE received, as well as the response(s) to any public comments.

Additionally, this section should identify and profile the major relevant issues and identify any issues considered but eliminated from further analysis. Keep in mind that an “issue” can be considered to be an effect (or a perceived effect, risk, or hazard) on physical, biological, social, or economic resources. In this section, avoid going into depth on the issues (detailed analysis of the issues should be saved for the Environmental Consequences), but instead introduce the relevant issues and frame the issues that will be discussed further in the Environmental Consequences. Include a statement of what the issue is (for example: Soil erosion leading to a decrease in water quality). Then provide a brief description of the issue (for example: Placement of riprap for bank stabilization along the Los Angeles River might result in temporary, construction related soil erosion, leading to decreased water quality in the vicinity of the project area.). Finally, identify what indicators (remember, the effects analyses must be quantitative whenever practicable) will be used to measure the environmental consequences (for example: Potential effects of the alternatives will be estimated using suspended sediment as an indicator).]

Per NEPA requirements and USACE guidance in EC 1165-2-220, the Los Angeles District prepared a public notice ([Appendix A]) describing the alternatives covered by the proposed action, and the potential environmental effects. This public notice was posted on the Los Angeles District website from [date] through [date], inviting public comment on the proposed action. No comments or inquiries were received in response to the public notice.

# 2.0. ALTERNATIVES

## 2.1. Summary

EC 1165-2-220 specifies that for Section 408 Permission, reasonable alternatives should focus on two scenarios: 1) no action and 2) the proposed action (Requester’s preferred alternative). This section describes both alternatives and compares them in terms of their environmental impacts.

[An EA for a Section 408 Permission should only include two alternatives, the no action and the Requester’s Preferred Alternative. It is not necessary to include a section describing alternatives considered but eliminated.

In addition to features to be constructed, the description should include the location of staging areas, borrow pits, haul routes, and other information necessary to determine effects of the proposed action’s implementation, operation, and maintenance. Additionally, best management practices, monitoring, permitting actions, and compliance with building codes should be included in the description of the proposed action.

Throughout the Alternatives section, it is very important to use the word “**would**”, not “**will**.” Describe the alternative as it **would** be, using the word **will** is pre-decisional.]

## 2.2. No Action Alternative

[The no action alternative is what would happen if USACE denied the Section 408 Permission for the proposed action. There are two common meanings for “no action”: either continue present management activities without doing the proposed project, or don’t do anything at all. Be sure to define exactly which meaning of no action is used for the document. Keep in mind that under the no action alternative, environmental consequences will still occur because the environment is not static.]

## 2.3. Requester’s Preferred Alternative

[This section should be a complete description of the proposed action. This description should include all descriptions of all management requirements, mitigations/best management practices, monitoring, and maintenance. Make sure that any staging areas, access routes, borrow areas, spoils sites, etc. have been identified.]

Example:

The USACE is in receipt of a Third-Party Permittee Section 408 Permission from XXXX County Regional Wastewater Reclamation Department, through XXXX County Regional Flood Control District, the non-Federal sponsor. The Third-Party Permittee is requesting permission from USACE to install a sewer line under the XXXX Channel, as part of the phased “XXXX Project”. The XXXX is proposing to install approximately 93 feet of a 60-inch diameter steel casing pipe, a minimum 2 feet underneath XXXX Channel, via jack and bore method to carry three HDPE sanitary sewer pipes of varying diameter up to 28-inches, between I-10 and east XXXX Way adjacent to the XXXX Hospital at channel STA 104+51, in the city of Tucson, Pima County, Arizona. The jack and bore excavation pits for construction purposes would be outside the channel footprint. Construction staging and material placement would be in the construction right-of-way along railroad property, to the north and south of the XXXX Channel. No construction would occur within the channel itself.

# 3.0. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

## 3.1. Summary

[This is a good place to let the readers know that this section will discuss both the existing conditions in the analysis area and the environmental consequences of the alternatives. Additionally, explain the organization of this section, particularly the order in which the relevant resources will be presented. Include a brief description of the area where the proposed action would take place, reference appropriate maps.]

### 3.1.1. Affected Environment and Environmental Consequences Summary

[In this section, provide a summary of the Affected Environment and Environmental Consequences. Provide pertinent definitions and cite relevant guidance/regulations. See example text in black below.

The Affected Environment section should succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration, including the reasonably foreseeable environmental trends and planned actions in the area(s). The discussion should include the environmental impacts of the proposed action and the significance of those impacts. Consider subsequent causal chain of connected actions that are reasonably certain to occur and provide the baseline for the comparisons in the environmental consequences section. Effects do not include those effects that the agency has no ability to prevent due to its limited statutory authority or would occur regardless of the proposed action. Do not include extraneous information that does not provide context and a baseline for understanding the effects analysis for each resource. A common mistake is to include large quantities of information that do not help the reader understand the environmental effects.

For each resource be sure to stipulate the geographic analysis area that will be described in the Affected Environment and analyzed for effects in the Environmental Consequences section. Thus, the baseline area for each resource may often extend beyond the project area and will generally differ from resource to resource. For example, the geographic scope for water resources may be an entire watershed.

When analyzing effects in the Environmental Consequences section, discuss the cause-and-effect relationships behind the end issue. In other words, an action (cause) leads to effects that result in impacts (both adverse & beneficial) that the “public” (i.e., humans) cares about. When discussing effects, always tie them back to the issue that the public cares about. For example, public issues could be effects on the deer population, effects on the number of recreation days at a specific recreation site, effects on water quality within a given reach of a river, etc. Whenever possible, quantify the effects (e.g., acres of habitat lost, amount of sediment entering a stream, tons of CO2 released, number of trees cut down, number of recreation days lost, etc.). Effects to most resources can and should be quantified. In the event that an effect can only be indicated as a trend (e.g., low, moderate, high), keep in mind that both quantifications and trends require careful explanation and interpretation. Quantification is preferred over trends, do not use trends when an effect can be quantified. If there are instances where the data are incomplete or unavailable, identify and explain this.

When using words such as “**minor**”, “**substantial**”, “**short-term**”, and “**long-term**” to consider the degree of effects, these words must be defined. Without explanation, these types of words have essentially no meaning. For example, **short-term** could mean three months to one person, and five years to another person. As previously mentioned, quantifiable terms are preferable over ambiguous words. For example, instead of stating “Project effects on air quality would be **minor**”, state that “The project would release 0.0003 tons of nitrogen dioxide (NO2), this is below de minimis standards. Additionally, with the implementation of minimization measures, the project would conform to the State Implementation Plan.”

Keep in mind that typically the No Action Alternative will have some sort of impact(s) on most resources. Many EAs make the mistake of simply stating that under the No Action Alternative there will be no effects. This is not sufficient; a meaningful effects analysis must be completed for the No Action Alternative as well as the Requester’s Preferred Alternative.

Be mindful of how the words “**significant**” and “**significantly**” are used in the document. In considering whether the effects of the proposed action are significant, agencies shall analyze the **potentially affected environment** and **degree of the effects** of the action (40 CFR 1501.3). In considering the potentially affected environment consider the specific action, the affected area (national, regional, or local) and its resources. In considering the degree of the effects consider the following, as appropriate to the specific action: (i) Both short- and long-term effects. (ii) Both beneficial and adverse effects. (iii) Effects on public health and safety. (iv) Effects that would violate Federal, State, Tribal, or local law protecting the environment. One of the most common pitfalls is not devoting enough effort to identifying effects that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action that may affect a given resource within the geographic boundary that has been defined.

Remember that adverse effects do not necessarily equal significant effects. For example, a project may have an adverse effect on a threatened species from an Endangered Species Act perspective; however, this effect may not be significant from a NEPA compliance perspective. Also, do not forget to disclose any beneficial effects of the proposed project.

Per CEQ regulations, mitigation includes avoiding, minimizing, rectifying, reducing or eliminating, and/or compensating for the impact. The Requester’s Preferred Alternative should include all mitigations and the Environmental Consequences section should essentially describe the effectiveness of the mitigations. We recommend reviewing CEQ’s guidance on the use of mitigation and monitoring (CEQ 2011).]

CEQ guidance directs agencies to succinctly describe the environment of the area(s) to be affected by the alternatives and to then discuss the environmental impacts of the alternatives (40 CFR 1502). CEQ instructs agencies to avoid “useless bulk”, keeping the description of the affected environment only as long as necessary to understand the effects of the alternatives (40 CFR 1502.15).

Following this guidance, the affected environment will describe the existing conditions of the areas to be affected by the alternatives and will provide the baseline for the comparisons in the environmental consequences section. The environmental consequences will discuss the environmental impacts of the Requester’s Preferred Alternative and the No Action Alternative. Consideration will be given to the following and discussed as appropriate:

(1) The environmental impacts of the proposed action and the significance of those impacts.

(2) Any adverse environmental effects that cannot be avoided should the proposal be implemented.

(3) The relationship between short-term uses of man’s environment and the maintenance and enhancement of long-term productivity.

(4) Any irreversible or irretrievable commitments of resources that would be involved in the proposal should it be implemented.

(5) Possible conflicts between the proposed action and the objectives of Federal, regional, State, Tribal, and local land use plans, policies and controls for the area concerned.

(6) Energy requirements and conservation potential of various alternatives and mitigation measures.

(7) Natural or depletable resource requirements and conservation potential of various alternatives and mitigation measures.

(8) Urban quality, historic and cultural resources, and the design of the built environment, including the reuse and conservation potential of various alternatives and mitigation measures.

(9) Means to mitigate adverse environmental impacts.

(10) Where applicable, economic and technical considerations, including the economic benefits of the proposed action. (40 CFR 1502.16). For the purposes of this document, the terms effects and impacts are synonymous and used interchangeably.

## 3.2. AIR QUALITY

### 3.2.1. Affected Environment

[Example:

The Clean Air Act identified and established the National Ambient Air Quality Standards (NAAQS) for a number of criteria pollutants in order to protect the public health and welfare. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. The United States Environmental Protection Agency (EPA) has set NAAQS for six principal pollutants, which are called criteria pollutants. The criteria pollutants include ozone (O3), carbon monoxide (CO), suspended particulate matter (PM), sulfur dioxide (SO2), nitrogen dioxide (NO2), and lead (Pb). PM emissions are regulated in two size classes: Particulates up to 10 microns in diameter (PM10) and particulates up to 2.5 microns in diameter (PM2.5).

A region is given the status of “attainment” or “unclassified” if the NAAQS have not been exceeded. A status of “nonattainment” for particular criteria pollutants is assigned if the NAAQS have been exceeded. Once designated as nonattainment, attainment status may be achieved after three years of data showing non-exceedance of the standard. When an area is reclassified from nonattainment to attainment, it is designated as a “maintenance area,” indicating the requirement to establish and enforce a plan to maintain attainment of the standard. The Proposed Action is located in the city of XXXX/county of XXXX. The city/county of XXXX is in attainment with all of the NAAQS except XXXX; the XXXX urban area is in maintenance for XXXX. Because operations and maintenance of the proposed alteration would not affect the USACE project, the focus of this analysis is on construction emissions.

Section 176(a) of the federal Clean Air Act states that a federal agency cannot issue a permit for, or support an activity within, a nonattainment or maintenance area unless the agency determines it will conform to the most recent EPA-approved State Implementation Plan (SIP). Thus, a federal action must not:

• Cause or contribute to any new violation of a NAAQS.

• Increase the frequency or severity of any existing violation.

• Delay the timely attainment of any standard, interim emission reduction, or other milestone.

A conformity determination is required for each criteria pollutant or precursor where the total of direct and indirect emissions of the criteria pollutant or precursor in a nonattainment or maintenance area caused by the federal action would equal or exceed the General Conformity applicability rates specified in 40 C.F.R. section 93.153. The applicability rate for XXXX is XXXXXXXX.

Air quality within the city/county of XXXX is monitored by XXXX. XXXX operates XXXX air quality monitoring sites with the closest being the XXXX monitoring site located approximately XXXX miles XXXX of the Proposed Action Area (cite source of information).]

### 3.2.2. Effects on Air Quality

#### 3.2.2.1. Effects of the No Action Alternative

Example:

The No Action Alternative would leave the Proposed Action Area in its present conditions, and no changes to the existing environment would occur. Thus, no additional sources of pollutant emissions other than those that are currently being generated by current O&M activities at the Proposed Action Area would occur.

#### 3.2.2.2. Effects of the Requester’s Preferred Alternative

Example:

Because operations and maintenance of the proposed alteration would not affect the USACE project, the focus of this analysis is on construction emissions.

**Direct Effects**

Example:

Construction emissions include emissions from site preparation, heavy construction equipment, materials movement, and vehicle trips by the construction crew commuting to the Proposed Action Area. Emissions from construction activities are generally short-term and result in localized effects to air quality. Emissions during construction of the Proposed Action (excavation, grading, generators, construction) would be minimal and are not anticipated to affect local or regional long-term air quality.

An Air Quality and Greenhouse Gas Emissions Study was conducted by XXXX for the overall XXXX Project (Appendix C). Total construction emission estimates were calculated for the entire project based on modeling results for emissions generated from on-site sources, such as heavy construction equipment and architectural coatings, in addition to off-site emissions from sources such as construction worker vehicle trips and haul truck trips, assuming construction would take place XXXX days per week for a total of XXXX days in 2023 and XXXX days in 2024. During construction in 2024, the year with the great amount of emissions, ozone would be XXXX tons/year, NO2 would be XXXX tons/year, PM10 would be XXXX tons/year, and PM2.5 would be XXXX tons/year. For all pollutants, these emissions would not exceed the applicability rates (XXXX tons/year for ozone; XXXX tons/year for NO2; XXXX tons/year for PM2.5 and XXXX tons/year for PM10). As such, ozone, NO2, PM10, and PM2.5 emissions during construction of the vehicular bridge would not equal or exceed the general conformity applicability rate.

Potential effects due to fugitive dust generation from construction activities would also be short-term, localized, and would be minimized by the implementation of the air quality BMPs included as part of the Requester’s Preferred Alternative. Therefore, the Proposed Action would not result in direct adverse effects related to air quality.

**Indirect Effects**

Example:

The Proposed Action would not result in changes to land use patterns or induce an increase in growth, as commercial, industrial, and retail facilities adjacent to the Proposed Action Area are either already built or are already planned to be built. Furthermore, XXXX Avenue currently provides access to land uses on both sides of the XXXX channel, and an increase in annual average daily traffic is already projected in this corridor by the 2042 forecasted year (Herman 2019). Therefore, the Proposed Action would not generate an increase in traffic within the Proposed Action Area. No indirect adverse effects to air quality would occur.

**Conclusion**

Example:

Impacts to air quality would be less than significant.

## 3.3. Greenhouse Gas EMISSIONS

### 3.3.1. Affected Environment

Example:

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO2), methane (CH4), nitrous oxides (N2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation. Currently, there are no Federal standards for GHG emissions, and no Federal regulations have been set at this time. The estimated GHG emissions are included for the purpose of disclosure under NEPA.

Consistent with section 102(2)(c) of NEPA and pursuant to CEQ’s interim guidance on Consideration of Greenhouse Gas Emissions and Climate Change (January 09, 2023), federal agencies must disclose and consider the reasonably foreseeable effects of their proposed actions, including the extent to which a proposed action and its reasonable alternatives (including the no action alternative) would result in reasonably foreseeable GHG emissions that contribute to climate change and disclose the associated social costs of GHGs. The analysis herein provides a quantification of reasonably foreseeable GHG emissions associated with known construction activities for the Proposed Action and the social costs. Although a reduction in vehicle trips and trip lengths is anticipated during operation of the Proposed Action, a quantification of the reduction in GHG emissions associated with such a reduction in trips and trip lengths would be speculative in nature. Therefore, quantification of GHG emissions and their contribution to climate change is limited to construction activities.

Example:

An inventory of GHG emissions was conducted for the XXXX County Climate Action Plan Update (XXXX County 2019). Sources of GHG emissions are typical of those within an urban setting with a majority of emissions coming from on-road transportation, followed by agriculture, electricity usage, and natural gas usage. Regional GHG emission trends generally follow national trends.

### 3.3.2. Effects on Greenhouse Gas Emissions

#### 3.3.2.1. Effects of the No Action Alternative

Example:

The No Action Alternative would leave the Proposed Action Area in its present conditions, and no changes to the existing environment would occur. There would be no increase in current levels of GHG emissions.

#### 3.3.2.2. Effects of the Requester’s Preferred Alternative

**Direct Effects**

Example:

Construction is anticipated to result in approximately XXXX MT CO2e over the entire construction period (refer to Appendix C for modeling results) and estimated $XX in social costs. This would be considered a negligible increase in overall regional GHG emissions associated with the Requestor’s Preferred Alternative and would not substantially contribute to climate change. Additionally, the Proposed Action would provide a Class I Bike Lane/Multi-Use Trail along the vehicular bridge, which is consistent with the Southern California Association of Governments (SCAG) 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals of improving mobility, accessibility, reliability, and travel safety for people and goods, and increasing person and goods movement and travel choices within the transportation system.

Currently, XXXX Avenue provides access to land uses on both sides of the XXXX Channel. The Proposed Action would provide a bridge across the XXXX Channel, resulting in a connected vehicular, bicycle, and pedestrian corridor between the existing segments of XXXX Avenue. Operation of the Proposed Action would enhance local and regional connectivity and would be expected to reduce both vehicular trips and trip lengths by providing the opportunity for alternative modes of travel and eliminating the need for out of direction travel to land uses on either side of the XXXX Channel. Such a reduction in trips and trip lengths is anticipated to result in a decrease in GHG emissions in the vicinity of the Proposed Action Area, contributing to an overall reduction in regional GHG emissions. Such a reduction in GHG emissions would minimize the potential for adverse effects related to climate change. Therefore, the Proposed Action would not result in direct adverse effects related to GHG emissions.

**Indirect Effects**

Example:

The Proposed Action would not result in changes to land use patterns or induce an increase in growth, as commercial, industrial, and retail facilities adjacent to the Proposed Action Area are either already built or are already planned to be built. Therefore, the Proposed Action would not generate an increase in traffic within the Proposed Action Area which could increase GHG emissions or contribute to climate change. No indirect adverse effects to greenhouse gas emissions would occur.

**Conclusion**

Example:

Impacts to GHG emissions would be less than significant.

## 3.4. NOISE

### 3.4.1. Affected Environment

Example:

The XXXX is in an urban area, close to roadways and shopping centers. Nearby noise sources include XXXX to the north (approximately XXXX mile away), XXXX to the south (approximately XXXX mile away), and the XXXX that is immediately adjacent to the Proposed Action Area. A nearby sensitive receptor is the XXXX located at XXXX. The closest roadway in the XXXX property is XXXX feet away from the Proposed Action Area.

### 3.4.2. Effects on Noise

#### 3.4.2.1. Effects of the No Action Alternative

Example:

The No Action Alternative would leave the Proposed Action Area in its present conditions, and no temporary changes to the existing noise environment would occur. General noise levels associated with the current O&M activities of the USACE project would continue to occur within the Proposed Action Area.

#### 3.4.2.2. Effects of the Requester’s Preferred Alternative

**Direct Effects**

Example:

Under the Requester’s Preferred Alternative, construction activity would result in temporary increases in noise in the vicinity of the Proposed Action Area, exposing nearby receivers to increased noise levels. Construction noise would typically be higher during the heavier periods of initial construction (i.e., site preparation and grading) and would be lower during the later construction phases (i.e., bridge construction and paving). Typical heavy construction equipment during project grading could include dozers, loaders, graders, excavators, lifts, water trucks and dump trucks. It is assumed that diesel engines would power all construction equipment. Noise resulting from construction activities, per the RPMs, would only occur during daytime hours between 7:00 a.m. and 7:00 p.m.. Construction equipment would not all operate at the same time or location. In addition, construction equipment would not be in constant use during the 12-hour operating day. The Requester’s Preferred Alternative includes, as an RPM, the requirement to maintain construction equipment with properly functioning mufflers on all internal combustion and vehicle engines during construction.

As described above, construction noise is typically loudest during activities that involve excavation and soil movement, such as site preparation and grading. A typical construction scenario would include an excavator, a dozer, a front-end loader, and an off-road truck working in concert to grade, excavate, load, and remove or replace soil within the alignment. A similar set of equipment would be used in the placement of bridge supports, road base, and paving. Blasting would not be required for construction of the bridge across the CCC. At a distance of XXXX feet, a dozer, front-end loader and a dump truck would generate a noise level of XXXX dBA Leq. The FTA’s construction noise limit is XXXX dBA Leq for residential land uses; therefore, project construction noise levels would not exceed the construction noise thresholds and there would be no direct adverse effects resulting from construction noise.

During operation, the Proposed Action would not emit on-site stationary noise sources. The primary effects from project operation would result from vehicles operating on the vehicular bridge, as it would represent a new permanent noise source in the Proposed Action Area. The Proposed Action would not generate new vehicle trips, but it would create a new continuous roadway and future traffic would generate noise along the new alignment. Noise level contours at nearby receivers for the Proposed Action during opening year (2022) and design year (2024) are presented in Figure 8 and Figure 9.

Due to the type of project and the lack of an existing roadway along most of the alignment, the Proposed Action was evaluated against the noise levels increase near existing roadways and against the City’s Land Use Compatibility levels (City of XXXX 2012). If the Proposed Action were to result in an increase of greater than XXXX dBA, but would not increase noise levels over the tentatively acceptable levels, then the noise level increase would not be considered significant.

Based on the modeled noise levels (refer to Appendix D for modeling results), in the opening year the Proposed Action would generally result in a XXXX dBA increase at local receivers, with the exception of Receiver 3 where the increase would be approximately 21 dBA. However, the future noise level at Receiver 3 would be XXXX CNEL and would be tentatively compatible with the non-residential land use standards (Figure 8; City of Eastvale 2012). Similarly, as discussed in Appendix D, the Proposed Action would generally result in a XXXX to XXXX dBA increase at local receivers in the design year with the exception of Receiver 3 where the increase would be approximately XXXX dBA. However, the future noise level at Receiver 3 would remain below XXXX CNEL and, as with the opening year noise levels, the design year noise levels would be tentatively compatible with the affected non-residential land use standards (Figure 9; City of XXXX 2012).

Overall, increases in traffic noise levels during operation of the Proposed Action would not result in direct adverse effects.

**Indirect Effects**

Example:

The Proposed Action would not result in changes to land use patterns or induce an increase in growth that would create additional sources of noise, as commercial, industrial, and retail facilities adjacent to the Proposed Action Area are either already built or are already planned to be built. Furthermore, Limonite Avenue currently provides access to land uses on both sides of the XXXX Channel, and an increase in annual average daily traffic is already projected in this corridor by the 2042 forecasted year (Herman 2019). Therefore, the Proposed Action would not generate an increase in traffic within the Proposed Action Area which could generate noise. The Proposed Action would not result in indirect adverse effects related to noise.

**Conclusion**

Example:

Impacts to Noise would be less than significant.

## 3.5. BIOLOGICAL RESOURCES

### 3.5.1. Affected Environment

Example:

The Proposed Action Area is mapped within the broad scale biotic community of the XXXX (citation). The Proposed Action Area is developed and consists of a concrete channel. According to the Biological Evaluation (BE) prepared by XXXX dated XXXX (XXXX; Appendix B), the Proposed Action Area does not contain any vegetation.

The Proposed Action Area is largely devoid of vegetation, although transplanted trees, and naturally occurring patches of vegetation on uplands and within drainage features are present. The transplanted trees are typically located XXXX and are typically composed of non-native XXXX. Thin, intermittent bands of native vegetation dominated by XXXX are located on upland areas. The highest density of vegetation within the area occurs within and around drainage features; XXXX being the dominant tree species; and XXXX being the dominant grass species. No XXXX is present within the Project Area. Other nondominant plant species that occur within the Project Area include XXXX.

Wildlife species within the Proposed Action Area include XXXX.

The BE indicates, based on surveys of the Proposed Action Area in 2016 and 2017, one species, XXXX that is listed by the U.S. Fish and Wildlife Service (USFWS) as endangered under the Endangered Species Act (ESA) has potential to occur within the Proposed Action Area. However, the Proposed Action Area is highly disturbed, urbanized, and void of vegetation, therefore, the likelihood of impacts to the XXXX is not anticipated. No XXXX were detected during surveys within the Proposed Action Area. No USFWS proposed or designated critical habitat occurs within the Proposed Action Area.

### 3.5.2. Effects on Biological Resources

#### 3.5.2.1. Effects of the No Action Alternative

Example:

The No Action Alternative there would be no change to the existing biological resources present in the Proposed Action Area, and no effects to biological resources would occur. Under this alternative, current O&M activities of the USACE project would continue to occur within the Proposed Action Area.

#### 3.5.2.2. Effects of the Requester’s Preferred Alternative

**Direct Effects**

Example:

Under the Requester’s Preferred Alternative, the Proposed Action would not result in the loss of vegetation or potential wildlife habitat because the Proposed Action Area is developed, and these resources do not occur. Based on the distance of critical habitat from the Proposed Action Area and lack of suitable nesting and foraging habitat, the Proposed Action is not expected to affect the least Bell’s vireo or it’s critical habitat. Due to temporary surface disturbance that would occur adjacent to the Proposed Action Area, and due to the presence of potentially suitable BUOW habitat in the vicinity of the XXXX Channel, in accordance with the MMRP and Migratory Bird Treaty Act, the Requester would conduct nesting bird surveys prior to any construction activities during bird breeding season from January 1 through August 31. If no nesting birds are detected during these surveys, then construction-related activities would proceed. Active nests within and adjacent to the construction zone would be avoided and provided a minimum buffer prior to the commencement of construction. In consideration of the existing site conditions and the MMRP measure described above, the Proposed Action would not result in direct adverse effects related to biological resources.

**Indirect Effects**

Example:

The Proposed Action would not result in changes to land use patterns or induce an increase in growth that would adversely affect biological resources, as much of the Proposed Action Area has been previously disturbed or partially developed and these resources do not occur. Therefore, the Proposed Action would not result in indirect adverse effects related to biological resources.

**Conclusion**

Example:

Impacts to Biological Resources would be less than significant.

## 3.6. CULTURAL RESOURCES

### 3.6.1. Affected Environment

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to consider the effects of their undertakings on properties listed on or eligible for listing on the National Register of Historic Places (NRHP) (historic properties) and to afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on any undertaking that would adversely affect historic properties. The NRHP is the official list of cultural resources recognized for their national, state, and local significance in American history, architecture, archaeology, engineering, and culture, and worthy of preservation. To be eligible for listing in the NRHP, a cultural resource must meet one of the four significance criteria, listed as items a-d below, specified at 36 CFR 60.4, which reads as follows: The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

1. that are associated with events that have made a significant contribution to the broad patterns of our history; or
2. that are associated with the lives of persons significant in our past; or
3. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
4. that have yielded, or may be likely to yield, information important in prehistory or history.

There is also a general requirement that properties be older than 50 years.

The Federal agency first determines if it has an undertaking that is a type of activity that could affect historic properties, and if so, the agency determines the area of potential effects (APE) and the scope of appropriate identification efforts. The agency then proceeds to identify historic properties in the APE through various methods, including consultation. If no historic properties are present or affected, the agency provides documentation to the State Historic Preservation Office (SHPO) and tribes, and, barring any objection in 30 days, proceeds with its undertaking. If historic properties are present, the agency proceeds to assess possible adverse effects on the identified historic properties based on criteria found in the ACHP regulations, in consultation with the SHPO. If they agree that there will be “no adverse effect,” consultation is completed. If they find that there is an “adverse effect,” or if the parties cannot agree and ACHP determines within 15 days that there is an adverse effect, the agency begins consultation to seek ways to avoid, minimize, or mitigate the adverse effects.

Mitigation under Section 106 of the NHPA is defined as a measure to resolve specific adverse effects to historic properties. Resolution of adverse effects is referenced in the NEPA review and documented in a Memorandum of Agreement (MOA) developed in consultation with the Section 106 consulting parties.

Per 36 CFR 800.16(d), the area of potential effect (APE) is the “geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist.”

Example:

The APE consists of the direct project footprint within the Section 404 and 408 permit areas and the indirect project footprint that includes an additional 50-foot buffer. Staging and equipment storage areas are located within the horizontal APE, and haul routes and vehicle access will be on existing roadways and through industrial lots. Within the direct APE are two sections of the XXXX Channel along with vacant parcels on either side of both sections of the channel. Within a small section of the indirect 50-foot buffer is a modern industrial facility constructed in 2017 and a dwelling within a contemporary residential development constructed in 2016. The APE also includes the vertical depth of ground disturbance associated with the undertaking, which is XXXX feet to XXXX feet for placement of the bridge pilings. The bridge itself will be level with the top edge of the channel on each side. The upper surface of the bridge will be approximately XXXX feet above the base of the channel itself. Architectural features on the bridge range from XXXX inches to XXXX feet XXXX inches, and street lighting will be placed on poles XXXX-XXXX feet tall. The total vertical APE both above and below ground surface will be approximately XXXX feet.

### 3.6.2. Effects on Cultural Resources

#### 3.6.2.1. Effects of the No Action Alternative

Example:

Under the No Action Alternative, there would be no change to the existing cultural resources present in the APE, and no effects to cultural resources would occur. Under this alternative, current O&M activities of the USACE project would continue to occur within the APE and would not result in significant impacts to cultural resources.

#### 3.6.2.2. Effects of the Requester’s Preferred Alternative

**Direct Effects**

Example:

The Requester’s Preferred Alternative involves the construction of a vehicular bridge across the XXXX Channel which would allow continuation of XXXX. Direct effects to cultural resources would be permanent changes caused by the Proposed Action that affect the elements of the cultural resources that make them significant. Indirect effects would be those that affected the location, design, setting, feeling, or association of cultural resources. Construction of the bridge would not involve demolition or alteration to any properties within the APE. As the surrounding parcels are vacant and do not retain historic properties, the proposed undertaking would not cause an adverse effect to any historic properties. The USACE determined there would be no effect to historic properties. The SHPO concurred with this determination on January 31, 2023. The Proposed Action would have no direct adverse effect on cultural resources.

**Indirect Effects**

Example:

The Proposed Action would not result in changes to land use patterns or induce an increase in growth that would adversely affect cultural resources. Therefore, the Proposed Action would not result in indirect adverse effects related to cultural resources.

**Conclusion**

Example:

Impacts to Cultural Resources would be less than significant.

## 3.7. HYDROLOGY AND WATER QUALITY

### 3.7.1. Affected Environment

Example:

The Proposed Action Area is located within the Sub watersheds of XXXX, all located within the XXXX Watershed and XXXX Subbasin. The XXXX is a linear, concrete lined, trapezoidal channel that conveys water through the XXXX and discharges into the XXXX River via XXXX Wash approximately XXXX miles to the XXXX. The XXXX is delineated as a potential WOTUS subject to CWA Section 404 authority administered by USACE.

### 3.7.2. Effects on Hydrology and Water Quality

#### 3.7.2.1. Effects of the No Action Alternative

Example:

Under the No Action Alternative, no physical changes to the Proposed Action Area would occur and human use and maintenance activities of the USACE project would remain unchanged. Additionally, groundwater usage and recharge would not be altered. The water quality in the vicinity of the Proposed Action Area would remain unchanged.

#### 3.7.2.2. Effects of the Requester’s Preferred Alternative

**Direct Effects**

Example:

Under the Requester’s Preferred Alternative, primary staging areas would be set up outside of the channel on nearby vacant land east and west of the XXXX Channel during construction of the roadway, retaining walls, utility infrastructure, and general bridge decking and surface work (Figure 7). These areas would be generally fenced off during construction activities with silt fencing and sediment barriers along the tops of the channel as necessary, and inlet protection along existing inlets within the general work area to prevent construction sediments from entering the channel. Work within the staging areas would include all roadway construction (including fill), retaining walls, bridge decking and surface elements, storm drain and utility infrastructure, and typical roadway landscaping and irrigation features.

During construction of the vehicular bridge’s foundation and modification to the channel within the XXXX Channel limits, the outer 25-30 feet on each side of the channel would be utilized as the general work area (Figure 7). The Requester’s contractor would install k-rail coated with impermeable plastic along the limits of each side and upstream to the toe of each channel to divert upstream channel runoff and prevent any construction pollutants or sediments from draining into the channel. Sandbags would also be used to seal any potential gaps and support brackets would be installed approximately every XXXX feet to maintain the stability of the k-rail barrier. Materials and construction spoils storage would be limited to support immediate construction and removal activities as needed and would be hauled away in a timely manner. The work area would generally be maintained and kept in clean fashion, and the area would be utilized primarily for construction activities. Work within this area would be limited to concrete removals, piles for the foundation, pier walls and debris guards, bridge columns, and bridge superstructure erection work. A Section 404 Clean Water Act authorization would be required. A Pre-Construction Notification for Nationwide 14 - Linear Transportation Projects- was submitted by the Requester to USACE’s Regulatory Division in July 2022. Effects on potential jurisdictional waters would include the placement of in-kind (i.e., concrete) pier walls within the channel and abutment work at the top of bank. Installation of k-rail, sandbags, and visqueen during the dry season for in-channel water diversion would prevent construction pollutants or sediments from adversely affecting water quality and would be inspected twice a week, as well as during pre-storm and post-storm conditions, to ensure efficacy.

The existing banks are currently faced with concrete. New permanent impacts to USACE jurisdiction would be XXXX acre and temporary construction impacts would be XXXX acres, for a total impact area of XXXX acres within existing jurisdiction (TABLE 1).

TABLE 1 IMPACTS TO POTENTIAL USACE JURISDICTIONAL WATERS

|  |  |
| --- | --- |
|  | **USACE Jurisdictional (acres/linear feet)** |
| **Project Component** | **Permanent** | **Temporary** |
| Vehicular Bridge  | XXXX/XXXX | XXXX/XXXX |

An erosion control plan, a sediment transport control plan, and a Stormwater Pollution Prevention Plan (SWPPP) would be prepared by the Requester, in accordance with Regional Water Quality Control Board (RWQCB) guidelines and other applicable BMPs, discussed in Section 2.3, Requester’s Preferred Alternative. These plans would mitigate erosion impacts and sediment degradation from construction activities by designating BMPs that are to be followed during construction of the Proposed Action. Additional examples of erosion-minimizing efforts may include measures such as avoiding excessive disturbance of steep slopes; using drainage control structures to direct surface runoff away from disturbed areas; strictly controlling vehicular traffic; implementing a dust-control program during construction; restricting access to sensitive areas; using vehicle mats in wet areas; and re-vegetating disturbed areas following construction. As part of the Proposed Action’s design, the Requester would restore all areas of temporary impacts to potential jurisdictional waters.

Implementation of the Proposed Action would not involve the discharge of wastes into the surface water or groundwater such that the Proposed Action would violate water quality standards or waste discharge requirements or otherwise substantially degrade water quality. Minor amounts of construction water may be placed in temporary settling basins, filters bags, storage and/or treatment containers as part of the best management practices associated with the Proposed Action. Secondary containment, placement of such devices outside of waters of the U.S., and other precautions would prevent discharges of construction wastewater into jurisdictional waters. Construction of the bridge across the XXXX Channel could temporarily increase turbidity in the XXXX Channel when construction activities disturb sediment. However, bridge construction activities within the creek bed would be constructed during dry or low-flow conditions and water diversion would occur as needed, which would minimize the potential for violation of water quality standards, waste discharge requirements, and potential degradation of water quality.

Construction of the Proposed Action could increase erosion and stormwater runoff due to site disturbance and increased impervious surface area. Compliance with applicable regulations and policies, including the preparation of a SWPPP during construction, would reduce water quality impacts. Additionally, on-site stormwater runoff would be captured and treated via stormwater drainage system consisting of catchment basins, biofiltration systems, and detention basins designed to accommodate the 85th percentile, 24-hour storm events. The Proposed Action would not result in substantial off-site hydromodification impacts and would not alter the course of the XXXX Channel.

The Proposed Action would not involve on-site groundwater extraction and would be served by existing and planned supplies, reducing potential impacts to groundwater levels. Impervious surface cover would increase on the Proposed Action Area under the Proposed Action, reducing the potential for recharge of the underlying aquifer. However, onsite runoff would continue to discharge to XXXX Creek and, ultimately, unlined reaches of XXXX Creek, XXXX Creek, and the XXXX River, where additional potential for infiltration and recharge exists.

The XXXX Channel is considered a non-wetland water resource. As such, the Proposed Action Area does not contain any wetlands, and therefore would be in compliance with Executive Order (E.O.) 11990, Protection of Wetlands. Additionally, the Proposed Action would not modify the existing floodplain or flow conveyance capacity of the XXXX Channel, nor would it induce development within the floodplain, which complies with E.O. 11988, Floodplain Management.

Overall, there would be no direct adverse effects to water resources.

**Indirect Effects**

Example:

The Proposed Action would not result in changes to land use patterns or induce an increase in growth that would adversely affect hydrology or water quality. Therefore, the Proposed Action would not result in indirect adverse effects related to water resources.

**Conclusion**

Example:

Impacts to Water Resources would be less than significant.

## 3.8. GEOLOGY AND SOILS

### 3.8.1. Affected Environment

Example:

The Proposed Action Area is generally oriented to the north and south. The topography consists of gentle slopes (0-3%) with elevations ranging from XXXX feet above mean sea level (amsl) to XXXX feet amsl. Elevation at the Proposed Action Area is approximately XXXX feet amsl. Soils within the Proposed Action Area are highly disturbed.

### 3.8.2. Effects on Geology and Soils

#### 3.8.2.1. Effects of the No Action Alternative

Example:

Under the No Action Alternative, there would be no impacts to geology and soils as no ground disturbing activities would occur in the Proposed Action Area.

#### 3.8.2.2. Effects of the Requester’s Preferred Alternative

**Direct Effects**

Example:

Under the Requester’s Preferred Alternative, construction activities may result in the temporary erosion of topsoil during grading activities. However, as part of the Proposed Action the Requester would develop a SWPPP and implement BMPs and RPMs to control erosion during construction, as described in Section 2.3, Requester’s Preferred Alternative. Upon project completion, the Proposed Action Area would be stabilized and would not contain any loose or exposed topsoil, and conditions that would cause long-term erosion would not be present. Therefore, there would be no direct adverse effect on geology and soils.

**Indirect Effects**

Example:

The Proposed Action would not result in changes to land use patterns or induce an increase in growth that would adversely affect geology or soil conditions. Therefore, the Proposed Action would not result in indirect adverse effects involving geology or soils.

**Conclusion**

Example:

Impacts to Geology and Soils would be less than significant.

## 3.9. LAND USE AND PLANNING

### 3.9.1. Affected Environment

Example:

The Proposed Action Area is located within the city limits of the City of XXXX, XXXX County, XXXX between XXXX and XXXX, and includes the XXXX, an existing trapezoidal, concrete channel designed to convey surface water for flood risk management. City of XXXX has mapped the Proposed Action Area as R-2, High Density Residential – Primarily for apartment houses; single-family development permitted (citation).

### 3.9.2. Effects on Land Use and Planning

#### 3.9.2.1. Effects of the No Action Alternative

Example:

Under the No Action Alternative, XXXX activities would not occur; therefore, there would be no impacts to existing land use or planning. The No Action Alternative would have no effect on existing zoning designations and land uses.

#### 3.9.2.2. Effects of the Requester’s Preferred Alternative

**Direct Effects**

Example:

Under the Requester’s Preferred Alternative, temporary disturbance from construction activities would occur, but would have no effect on the existing land use and zoning designations. Upon completion, the vehicular bridge would provide a more accessible route across the XXXX Channel to accommodate large commercial, industrial, and retail facilities that are planned to be built, or have already been built, in the vicinity of the Proposed Action, many of which require daily shipping and delivery activities using semi-trucks and trailers. As such, the Requester’s Preferred Alternative is consistent with the existing land use and zoning designations in the vicinity of the Proposed Action Area. There would be no direct adverse effect on land use and planning.

**Indirect Effects**

Example:

The Proposed Action would not result in changes to land use patterns or induce an increase in growth. Therefore, the Proposed Action would not result in indirect adverse effects on land use and planning.

**Conclusion**

Example:

Impacts to Land Use and Planning would be less than significant.

## 3.10. VISUAL AND AESTHETICS

### 3.10.1. Affected Environment

Example:

The Proposed Action Area consists of a concrete channel at grade. The Proposed Action Area does not support any officially designated scenic vistas in the immediately project vicinity.

### 3.10.2. Effects on Visual and Aesthetics

#### 3.10.2.1. Effects of the No Action Alternative

Example:

Under the No Action Alternative, the Proposed Action Area would remain in its pre-project conditions. The No Action Alternative would have no effect on visual and aesthetics.

#### 3.10.2.2. Effects of the Requester’s Preferred Alternative

**Direct Effects**

Example:

Under the Requester’s Preferred Alternative, temporary visual elements would consist of construction equipment and material staging in the vicinity of the Proposed Action Area. Once construction is complete, a new vehicular bridge would span the XXXX Channel. The Proposed Action Area is not located in an area identified as scenic by the XXXX General Plan. The General Plan does identify the XXXX River corridor as a scenic area, but the Proposed Action is not located in the vicinity of the corridor and would therefore have no effect on the views of this area. Scenic vistas of the XXXX Mountains to the north, XXXX Mountains to the south, and XXXX Hills to the east are intermittently accessible from public vantage points in the vicinity of the Proposed Action Area, such as XXXX Avenue, on days of good air quality. However, the Requester’s Preferred Alternative would not involve the construction of a structure that would substantially degrade the public view of XXXX Hills and the XXXX Mountains. Rather, the Proposed Action would provide vehicular access through currently inaccessible areas and would contribute to additional opportunities for views of distant hills and mountains. The overall quality of views of scenic vistas from existing publicly accessible vantage points would not substantially change. Therefore, there would be no direct adverse effect on visual and aesthetics.

**Indirect Effects**

Example:

The Proposed Action would not result in changes to land use patterns or induce an increase in growth, as commercial, industrial, and retail facilities adjacent to the Proposed Action Area are either already built or are already planned to be built. Therefore, the Proposed Action would not result in indirect adverse effects related to visual and aesthetics.

**Conclusion**

Example:

Impacts to Visual and Aesthetics would be less than significant.

## 3.11. TRANSPORTATION AND TRAFFIC

### 3.11.1. Affected Environment

Example:

Major roadways offering access near the Proposed Action Area include U.S. Interstate XXXX approximately XXXX mile to the XXXX and XXXX approximately XXXX mile to the XXXX. The XX Railroad is located immediately to the XXXX of the Proposed Action Area.

### 3.11.2. Effects on Transportation and Traffic

#### 3.11.2.1. Effects of the No Action Alternative

Example:

Under the No Action Alternative, traffic volumes and level of service would not be affected and would remain in pre-project conditions. The No Action Alternative would have no effects on transportation and traffic patterns.

#### 3.11.2.2. Effects of the Requester’s Preferred Alternative

**Direct Effects**

Example:

Under the Requester’s Preferred Alternative, a new segment of XXXX Avenue would be constructed, creating a connected corridor between the existing XXXX Avenue, west of the XXXX Avenue intersection, to the existing XXXX Avenue east of XXXX Avenue. Access to existing roadways in the vicinity of the Proposed Action Area (XXXX Avenue, XXXX Avenue, XXXX Avenue, and the existing segments of XXXX Avenue) would continue to be available during construction of the Proposed Action.

To access the Proposed Action Area, construction workers would take I-10 East to CA-60, exiting at either XXXX Avenue or XXXX Avenue. Construction equipment and haul trucks would access staging areas for the import and export of materials through XXXX Avenue. Access to the staging areas west of the XXXX Channel would be provided by XXXX Avenue from XXXX Avenue, while access to the staging areas east of the XXXX Channel would be provided by XXXX Avenue from XXXX Avenue. Refer to Figure 7 for details on the location of the construction staging areas.

Access to the areas inside XXXX Channel would be provided through the Channel Access Road, located north of the XXXX Avenue existing bridge structure. Construction equipment and personnel vehicles would access the channel by traveling southbound along the easterly portion of the XXXX Channel Maintenance Road from XXXX Avenue to an access point just north of XXXX Avenue. Construction equipment and personnel vehicles would exit the bottom of the channel through the same access point and travel north along the easterly portion of the XXXX Channel Maintenance Road to XXXX Avenue.

Minor and temporary effects on traffic would occur to allow construction vehicles and equipment access to the Proposed Action Area. The Requester would require its construction contractor to submit a Traffic Control Plan to formalize access routes and manage traffic safely. No detours or lane modification would be necessary for construction equipment to reach access points, or to drive from access points to the construction site.

At full build, the Proposed Action would contribute to the completion of the XXXX Avenue east-west corridor envisioned in the City of XXXX General Plan. The Proposed Action would improve the connectivity for vehicles and bicycles between the neighboring City of XXXX to the west and I-15 to the east. XXXX Avenue is designated as an Urban Arterial Highway facility. XXXX Avenue and XXXX Avenue are also classified as Urban Arterial Highways (City of XXXX 2012). Currently there is no east/west connector between XXXX Avenue and XXXX Avenue, so the vehicular bridge across the XXXX Channel would be expected to enhance local traffic circulation. However, operation of the bridge would not result in land use changes that would increase the amount of traffic in the area, as commercial, industrial, and retail facilities adjacent to the Proposed Action Area are either already built or are already planned to be built, and an increase in annual average daily traffic is already projected in this corridor by the 2042 forecasted year (Herman 2019).

Overall, no direct adverse effects on traffic would occur.

**Indirect Effects**

Example:

The Proposed Action would not result in changes to land use patterns or induce an increase in growth that would generate traffic within the Proposed Action Area, as XXXX Avenue currently provides access to land uses on both sides of the XXXX Channel and an increase in annual average daily traffic is already projected in this corridor by the 2042 forecasted year (Herman 2019). Therefore, the Proposed Action would not result in indirect adverse effects to transportation and traffic.

**Conclusion**

Example:

Impacts to Transportation and Traffic would be less than significant.

## 3.12. SOCIOECONOMIC AND ENVIRONMENTAL JUSTICE

### 3.12.1. Affected Environment

Example:

An analysis of demographic data was conducted to determine if low-income and minority populations are present within the vicinity of the Proposed Action Area. This analysis was performed using the CEQ’s Climate and Economic Justice Screening Tool (https://screeningtool.geoplatform.gov/en) per E.O. 14008 to provide a consistent government-wide identification of communities with environmental justice concerns, and use of the EPA’s online tool, Environmental Justice Screening and Mapping Tool (EJSCREEN; EPA Version 2.2), to describe the attributes of a community.

Using CEQ’s Climate and Economic Justice Tool, disadvantaged communities were not identified within census block XXXX, which includes the Proposed Action Area .

An analysis of demographic data was conducted to further derive information on the approximate locations of low-income and minority populations in the affected area using EPA’s EJScreen. Because the analysis considers disproportionate impacts, two areas must be defined to facilitate comparison between the area actually affected and a larger regional area that serves as a basis for comparison and includes the area actually affected. The larger regional area is defined as the smallest political unit that includes the affected area and is called the community of comparison. For purposes of this analysis, the Affected Area is an approximate one-mile polygon drawn around the Proposed Action Area. The Community of Comparison is defined as the City of XXXX.

E.O. 12898 defines a minority as an individual belonging to one of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic. A minority population, for the purposes of this environmental justice analysis, is identified when the minority population of the potentially Affected Area is greater than 50 percent or the minority population is meaningfully greater than the general population or other appropriate unit of geographic analysis. The E.O. does not provide criteria to determine if an affected area consists of a low-income population. For purposes of this EA, the CEQ criterion for defining minority population has been adapted to identify whether or not the population in an affected area constitutes a low-income population. An affected geographic area is considered to consist of a low-income population (i.e., below the poverty level, for purposes of this analysis) where the percentage of low-income persons: 1) is greater than 50%, or 2) is meaningfully greater than the low-income population percentage in the general population or other appropriate unit of geographic analysis.

TABLE X provides a summary of the demographics for the affected area, the City of XXXX, and the state of XXXX. Complete EJScreen Reports and U.S. Census data can be found in Appendix G. As shown in TABLE 2, 17 percent of the individuals in the affected area are considered below the poverty level. This percentage in the affected area does not exceed 50 percent. However, the affected area low-income population percentage is meaningfully greater than the low-income population in the City of XXXX, which is XX percent, and the State of XXXX which is 11.8 percent. Therefore, the affected area does contain a high concentration of a low-income population. Additionally, 57 percent of the individuals in the affected area are considered minority populations (TABLE 2). This percentage in the affected area exceeds 50 percent. However, the affected area minority population percentage is lesser than the minority population in the City of Eastvale, which is 73.5 percent, and the State of California which is 59 percent. Therefore, the affected area does contain a high concentration of minority populations.

TABLE X. DEMOGRAPHIC DATA FOR AFFECTED AREA, CITY OF XXXX, AND STATE OF XXXX

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Demographic** | **Subject** | **Affected Area1** | **City of XXXX2** | **State of XXXX3** |
| Population | Total Population |  |  |  |
| Households |  |  |  |
| Low Income Population |  |  |  |
| People of Color Population / Minority Populations  |  |  |  |
| Ethnicity | Hispanic or Latino of any Race |  |  |  |
| White Alone |  |  |  |
| Black Alone |  |  |  |
| American Indian Alone |  |  |  |
| Asian Alone |  |  |  |
| Pacific Islander Alone  |  |  |  |
| Other Race Alone |  |  |  |
| Two or more Races Alone |  |  |  |

1 Data for Affected Area derived from EJSCREEN reports (Appendix XX).

2 Data for City of XXXX derived from EJSCREEN reports (Appendix XX).

3 Data for State of XXXX derived from EJSCREEN reports (Appendix XX).

### 3.12.2. Effects on Environmental Justice

#### 3.12.2.1. Effects of the No Action Alternative

Example:

Under the No Action Alternative, no construction would occur in the Proposed Action Area, therefore, there would be no impacts to protected populations. There would be no changes to the social and economic character of the Proposed Action Area.

#### 3.12.2.2. Effects of the Requester’s Preferred Alternative

**Direct Effects**

Example:

Under the Requester’s Preferred Alternative, effects on minority and low-income populations would be temporary and minor. The Proposed Action would not cause displacement of such populations, and long-term beneficial impacts are anticipated by providing regional connectivity from XXXX Valley across I-15 to XXXX. As discussed previously, construction of the Requester’s Preferred Alternative would result in short-term changes in noise, water resources, aesthetics, air quality, soils, and traffic. Implementation of the MMRP and RPMs would reduce any temporary adverse effects. The Requester’s Preferred Alternative would not result in disproportionate and adverse human health and environmental effects and hazards on minority and/or low-income communities and would be in compliance with E.O. 12898, 13990, 14008, and 14096. Therefore, the Proposed Action would not result in direct adverse effects related to environmental justice.

**Indirect Effects**

Example:

The Proposed Action would not result in changes to land use patterns or induce an increase in growth, and the Proposed Action would not result in indirect adverse effects related to socioeconomics or environmental justice. Rather, the Proposed Action would be expected to benefit minority and/or low-income populations through enhanced local traffic circulation by providing an east/west connection between XXXX Avenue and XXXX Avenue. Therefore, the Proposed Action would not result in indirect adverse effects related to environmental justice.

**Conclusion**

Example:

Impacts to Socioeconomics and Environmental Justice would be less than significant.

## 3.13. HAZARDS AND HAZARDOUS MATERIALS

### 3.13.1. Affected Environment

Example:

The Proposed Action Area is approximately XXXX feet from the VA Hospital parking lot, and approximately XXXX to XXXX feet away from commercial business parking lots. EPA’s Toxic Release Inventory (TRI) Database shows no TRI areas of concern near the Proposed Action Area. A check of EPA’s EnviroMapper also shows no concerns near the site, although some businesses nearby are noted as “sites reporting to EPA.”

### 3.13.2. Effects on Hazards and Hazardous Materials

#### 3.13.2.1. Effects of the No Action Alternative

Example:

Under the No Action Alternative, no ground disturbing activities would occur. Therefore, there would be no potential for discharge of hazardous materials or an increased potential for other hazardous conditions.

#### 3.13.2.2. Effects of the Requester’s Preferred Alternative

**Direct Effects**

Example:

Under the Requester’s Preferred Alternative, accidental conditions could occur as a result of any of the following during project construction: direct dermal contact with hazardous materials, incidental ingestion of hazardous materials, or inhalation of airborne dust released from dried hazardous materials. The transportation of hazardous materials could result in accidental spills, leaks, toxic releases, fire, or explosion. Appropriate documentation for all hazardous waste that is transported, stored, or used in connection with specific project-site activities would be provided as required for compliance with existing hazardous materials regulations codified in the California Code of Regulations (CCR).

As discussed above, a Hazardous Materials Technical Study was conducted by XXXX and identified a portion of a property in the vicinity of the Proposed Action Area was used for agricultural purposes (Appendix H). Agricultural land use is typically associated with the use of pesticides and arsenic, thus creating potential for impacted soil to be encountered during soil disturbing and construction activities. The technical study recommends conducting a soil assessment on the existing nursery property within the footprint of the Proposed Action Area, properly abandoning and removing Aboveground Storage Tanks located in the covered storage area, and conducting a soil assessment in the vicinity of these tanks. The technical study concludes that, with adherence to these recommendations, the Proposed Action would not create a significant hazard to the public or environment. Additionally, BMPs for hazardous materials control would be in place (Refer to Section 2.3), and the Requester would require its construction contractor to implement a SWPPP to prevent storm water, construction runoff, fuels, chemicals, or liquids from entering surface water features during construction activities. This would prevent either construction wastes or urban wastes from entering the XXXX Channel for the duration of the Proposed Action construction. Overall, the Proposed Action would not result in direct adverse effects related to hazards and hazardous materials.

**Indirect Effects**

Example:

The Proposed Action would not result in changes to land use patterns or induce an increase in growth that would cause hazardous conditions or involve hazardous material operations within the Proposed Action Area, Therefore, the Proposed Action would not result in indirect adverse effects related to hazards or hazardous materials.

**Conclusion**

Example:

Impacts related to Hazards and Hazardous Materials would be less than significant.

# 4.0. Cumulative impacts

The federal CEQ regulations require that the implementation of NEPA includes an analysis of cumulative impacts. Federal regulations define “Cumulative impact” as: “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 actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. 1508.1(g)(3).

## 4.1. Past, Present, and Reasonably Foreseeable Future Actions

Example:

The past, present, and future projects that have influence regarding possible cumulative effects for this project occur from four primary categories. These include the development of the XXXXX Dam, the construction of arterial transportation routes including the XXXXX Parkway improvements and the XXXXX freeway, the development of residential and commercial areas within proximity to the site, and XXXXX.

The implementation of the XXXXX in the early XXXXs is the most immediate influence on this site. The associated XXXXX establishes a significant and permanent XXXXX physical barrier along the western edge of the XXXXX park site and is a prominent visual element of this site. The XXXXX combined with the XXXXX subject the site and portions of the surrounding area to potential storm water inundation in the event of a significant regional storm.

Two arterial roadway corridors have been improved within the last 10 years. These include XXXXX, which was widened to accommodate current and future traffic demands for XXXXX. The second primary corridor is the state highway known as XXXXX. This freeway corridor establishes a loop connection through the west area of the XXXXX metropolitan area to both the XXXXX and the XXXXX freeways. This serves a primary commuter route for access to XXXXX areas and the rest of the metropolitan area.

The development of two master planned communities within proximity of the site has occurred within the past XXXXX to XXXXX years. The two most significant and approximate master planned communities include XXXXX, which is south of the project area and separated from the project site by the XXXXX of the project site is a master planned community known as XXXXX. Both communities are master planned with neighborhood parks included within the development, but they do not offer the facilities of a community park. There are also future commercial and residential properties locate along the primary arterials that are subject to future development.

The XXXXX was opened to the public in Northeast. In spite of the influence of the Covid-19 pandemic at the time of its opening, the park has experienced a high level of use and some of the facilities operate at or above capacity levels. There are instances where patrons feel the play areas are too crowded. While the XXXXX facilities of the park offer some gain toward addressing the recreational facility demand for XXXXX, it has also aroused the interest of other potential park patrons who feel their areas of interest are still not met. The current demand for additional recreational facilities is still very high and can be best demonstrated by the public’s response to an online questionnaire issued during the initial planning of XXXXX when more than XXXXX responses were received expressing high levels of interest for all aspects of new facilities for both passive and active recreational activities.

## 4.2. Air Quality

Example 1:

With an expanded XXXXX, the distance and travel time for residents who currently drive to XXXXX to participate in recreational opportunities would be reduced, along with accompanying emissions. Additionally, as the XXXXX vegetation matures, carbon dioxide photosynthesis facilitates the turf and plant’s absorption of carbon dioxide, using the carbon as fuel and releasing oxygen into the atmosphere, in turn improving air quality. BMPs would be implemented during construction. In addition to the restored native groundcovers and construction phase erosion prevention BMPs identified in Section 3.2, air quality protection measures would include: continuous construction site watering (including all access roads); vehicle and equipment track-out pads to avoid dirt track-out onto travelled roads; the application of hydro-mulch dust palliatives; idling limitations; and posted off-road speed limits. The cumulative effects would be less than significant.

Example 2:

As discussed in Section 3.2, given the short duration of construction, it is unlikely for emissions to equal or exceed the general conformity applicability rate. This and future construction developments will stay within acceptable general conformity applicability rates and implement BMPs. The BMPs would be implemented during construction to reduce air quality impacts from fugitive dust and/or particulate matter generated by the Proposed Action. Cumulatively considerable impacts to air quality are not anticipated.

## 4.3. Greenhouse Gas Emissions

Example:

Once the Proposed Action is completed, traffic beyond current levels may result in negligible increase of GHG emissions as it would XXXXX near the Proposed Action area. The construction phase of the Proposed Project would result in a negligible increase of overall regional GHG emissions. GHG emissions are considered a cumulative impact, because one project is not large enough to affect GHG emissions. Therefore, GHG emissions are regarded as cumulative impacts. Cumulatively considerable impacts from GHG are not anticipated.

## 4.4. Noise

Example 1:

The XXXXX and the XXXXX create natural and manmade sound barriers. The XXXXX area establishes a distance buffer from the XXXXX and the residents on the opposite side of the XXXXX. There are no significant cumulative impacts anticipated for noise from the site.

Example 2:

Cumulatively considerable impacts are not anticipated. Noise impacts resulting from construction activities would be temporary and intermittent and are generally permitted during construction activities in the city of XXXX. Compared to the future no-project condition, future noise levels resulting from traffic near the Proposed Action area would not be within the range of human perception; therefore, no long-term cumulative effect would occur.

## 4.5. Biological Resources

Example 1:

Construction of this project would result in the loss of approximately XXXXX acres of potential nesting and foraging habitat for migratory birds, including XXXXX due to construction. Additional acreage, unknown and not part of this analysis, include the construction of XXXXX, the construction of the XXXXX freeway, and the development of nearby residential communities. Despite these existing disturbances, measures discussed above would be implemented. Moreover, the project vicinity is currently dominated by XXXXX vegetation suitable for occupancy by these species.

Future residential and commercial development is expected to continue along XXXXX and the XXXXX freeway corridor as the urban areas to the south continue to expand XXXXX towards the project site. If development continues as anticipated, cumulative impacts to migratory bird habitat associated with this project would be less than significant.

Example 2:

As discussed in Section 3.5, the Proposed Action area is highly urbanized and has minimal to no vegetation. Therefore the likelihood of impacts to the XXXX, listed as threatened by USFWS, is not anticipated. Biologist review has determined there are no concerns for biological resources in the Proposed Action area. Current and future construction developments are very unlikely to directly harm and/or remove habitat for XXXX as the Proposed Action area is highly urbanized and contains minimal to no vegetation. The Proposed Action is not expected to substantially contribute to cumulative effects to any protected species or their habitats. Cumulatively considerable impacts to biological resources are not anticipated.

## 4.6. Cultural Resources

Example:

Cultural resources have been identified in the project area and along the XXXXX drainage as a result of the XXXXX project, adjacent residential developments, and transportation projects. Impacts have occurred and would continue to occur in and near the XXXXX as urban development increases and residential, commercial, and transportation development continue to occur. The combined impacts of future development within and adjacent to the XXXXX drainage, paired with current and past impacts, have the potential to incrementally affect cultural resources. These incremental impacts can result in larger, more widespread disturbance of cultural resources to the point where entire cultural landscapes are impacted. The data recovery program implemented in XXXXX for sites XXXXX, XXXXX, and XXXXX and appropriate implementation of consultation, avoidance, and mitigation measures would minimize the loss of information and provide an opportunity for broader understanding of past and current traditional lifeways in the project area. The project area for XXXXX construction does not encompass any of the NRHP eligible sites. As such, all NRHP eligible sites will be avoided for this undertaking. The impacts of the Project would be less than significant.

## 4.7. Hydrology and Water Quality

Example 1:

The water supply for this phase was calculated and implemented in XXXXX as a part of the City’s system. The XXXXX facilities are designed to utilize reclaimed water once it is available in the area. These water sources are not drawing from the localized groundwater sources. Cumulative impacts to water quality and groundwater are expected to be less than significant.

Example 2:

Cumulatively considerable impacts to water quality would not result from the Proposed Action as discharge of dredged or fill material into waters of the United States, including wetlands, would not occur. No adverse effect in water quality in the vicinity of the Proposed Action is anticipated. Future actions would need to comply with the specific requirements if discharge of dredged or fill material into waters of the United States does occur. Cumulative impacts to water quality are expected to be less than significant.

## 4.8. Geology and Soils

Example:

The hard dig conditions expected would occur with the installation of utility lines as a part of the XXXXX development. This and future phases may have similar hard dig conditions as encountered in XXXXX, but these efforts would not impact the geological conditions of the site. Erosion protection practices would be implemented during construction, and the ongoing maintenance of the XXXXX would address potential soil erosion conditions. Cumulative impacts to geology and soils are expected to be less than significant.

## 4.9. Land Use and Planning

Example:

The Phase 2 area of the XXXXX project site is an undeveloped XXXXX with ancillary services to be located on the existing XXXXX. XXXXX development is limited to the XXXXX acre site being evaluated. Adjacent land use is precluded from development secondary to restrictions placed on the XXXXX area of the dam and the slope conditions of the XXXXX. Implementation of the proposed XXXXX would further develop XXXXX and would add to the cumulative impacts from changes in the XXXXX landscape. Beyond this phase of development, potential future phases of the XXXXX are undetermined. At the time future phases are developed, additional NEPA documentation would be completed.

## 4.10. Visual and Aesthetics

Example:

The cumulative impacts for the aesthetic quality for the XXXXX are expected to be less than significant. The primary residents with a view of the XXXXX area are approximately XXXXX miles north and east of the XXXXX site. These are the residents of the XXXXX. As these residents look to the XXXXX across the XXXXX area, they see primarily natural, mostly undisturbed, XXXXX vegetation. The interruption to their view is the distant view of the approximately XXXXX and portions of the XXXXX freeway, which has night lighting. The visual influence of Phase 1 XXXXX established views of the XXXXX features, landscaping, and lighting. Views of XXXXX would be very similar to what is visible from Phase 1 with the addition of more XXXXX features. The XXXXX would have both site-level lighting and high-mast lighting for the sports fields. Because of the distance between the XXXXX and the residents, the impacts from these lights are expected too not be significant. The impacts of the lighting would be minimized with the use of state-of-the-art LED fixtures which shield the globes and offer very effective light cut off properties, minimizing light spillage and responding to dark sky ordinances.

## 4.11. Transportation and Traffic

Example:

The access improvements proposed for the XXXXX accommodate the initial phase and the current and possible future phases of vehicular ingress and egress from the site to XXXXX. With the adjacent connection to the XXXXX and the proximity to the XXXXX freeway, residents within the XXXXX’s regional area have efficient and convenient roadway access to the XXXXX. This further enhances the value of this site as an easily accessible recreation destination. Refer to additional commentary on traffic studies in Section 3.13.

The residents of XXXXX would benefit from the convenience provided by the location of this XXXXX and the varied recreational opportunities it would provide. This is in comparison to their travel time to access similar facilities at XXXXX’s other community park locations. The reduction in travel time and in turn energy consumption is anticipated and would be realized even more as the continued residential growth occurs to XXXXX.

As current and future residential developments increase the population density of the area, the cumulative impacts associated with these residents’ desire for XXXXX would increase. To accommodate hikers, bikers, and equestrians, there is a current and future need for the City to expand its current trails system in this area. This would likely result in the extension of existing trails to connect to the XXXXX site as a destination. The cumulative impact to the surrounding environment of City designed and managed single-track trails when added to their existing system would be beneficial.

## 4.12. Socioeconomic and Environmental Justice

Example:

As discussed in Section 3.12 there would be no effect on an EJ community. Therefore, there would be no cumulative effects on an EJ community or the local economy under the Preferred Alternative, and therefore no cumulative impacts are anticipated.

## 4.13. Hazards and Hazardous Materials

Example:

The Proposed Action does/does not increase the number of hazardous materials-related land uses in the Proposed Action area. As discussed in Section XXXXX, there are/are no TRI areas of concern within a 1-mile radius and HTRW is/is not an issue on the Proposed Action site. The ground disturbing construction activities are not expected to pose a risk of encountering HTRW materials. Since there are no TRI areas of concern, future cumulative impacts are not expected to occur. Therefore, cumulative impacts to hazards and hazardous materials are expected to be less than significant.

# 5.0. ComplIANCE WITH ENVIRONMENTAL lAWS AND rEGULATIONS

The following federal laws, regulations, and executive orders are relevant to the proposed action. The Requester’s Preferred Alternative would be in compliance with all laws, regulations, and executive orders, as described in the following sections.

## 5.1. Federal Laws

Clean Air Act of 1972, as amended, (42 U.S.C. 7401 et seq.)

[The Clean Air Act regulates air emissions from stationary and mobile sources. Section 176(C) of the Clean Air Act, also known as the General Conformity Rule, prohibits federal agencies from carrying out, funding, or permitting any activity in a nonattainment or maintenance area “which does not conform to an implementation plan after it has been approved or promulgated” (42 U.S.C. 7506).]

Example 1:

John County is in attainment of the National Ambient Air Quality Standards except the Rillito area is in non-attainment for PM10. The project area is in attainment with ambient air quality standards. The Third-Party Permittee would implement Best Management Practices (BMPs) as necessary to reduce air quality impacts from fugitive dust and/or particulate matter, including road watering if wind speed exceeds 20 mph. The construction equipment shall be properly maintained to minimize release of diesel and hydrocarbon effluent into the atmosphere. All permit requirements, including those regarding emissions, fuel use, and fuel consumption shall be adhered to during construction activities. All construction equipment shall be permitted as required under state law, well maintained, and all internal combustion engines properly tuned to avoid excessive diesel smoke generation. The proposed action would not equal or exceed the applicability rate for PM10. Therefore, the proposed action is in compliance with this Act.

Example 2:

As discussed in Chapter 3, above, the Requester’s Preferred Alternative has been analyzed for conformity applicability pursuant to regulations implementing Section 176(c) of the Clean Air Act. It has been determined that the total direct or indirect emissions of CO associated with the Section 408 activity would not equal or exceed the general conformity applicability rate; therefore, a general conformity determination is not required. The proposed action complies with this Act.

Clean Water Act, as amended (33 U.S.C. 1341 and 1344)

[Section 404 of the Clean Water Act regulates the discharge of dredged or fill material into waters of the United States, including wetlands. The USEPA promulgates Section 404 regulations; however, the USACE Regulatory Program evaluates, and issues permits for proposed activities in waters of the United States. Section 401 of the Clean Water Act requires that applicants for federal permits or licenses provide certification from the state that any discharges will comply with state-established water quality standard requirements. Applicants must obtain a Section 401 certification or waiver for the proposed action before the USACE can authorize a permit under Section 408 and Section 404. EC 1165-2-220 specifies that USACE will coordinate internally to ensure that the Section 404 permit and the Section 408 Permissions are consistent.]

Example 1:

The proposed project involves construction using jack-bore technique to avoid potential jurisdictional waters of the United States. Therefore, a Section 404 permit and Section 401 water quality certification would not be required for the proposed action.

Example 2:

No discharge of dredged or fill material into waters of the United States, including wetlands, would occur. Therefore, a Section 404 permit and Section 401 WQS would not be required for the Section 408 Activity.

Endangered Species Act of 1973, as amended, (16 U.S.C. 1531 et seq.)

[The Endangered Species Act requires federal agencies to consult with the USFWS and/or NMFS when their actions may affect federally threatened or endangered species or their designated critical habitat.]

Example:

The proposed action area does not contain any occurrences of Federally listed species or designated critical habitat. Therefore, consultation with the USFWS is not required for the proposed action. The proposed action is in compliance with the Act.

Fish and Wildlife Coordination Act of 1958, as amended, (16 U.S.C. 661 et seq.)

[The FWCA requires that federal agencies consult with the USFWS and the head of the agency exercising administration over the wildlife resources of the particular state, “whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever” (16 U.S.C. 662).]

Example:

The proposed action would not modify or impound any water body. Construction would not affect any fish and wildlife habitat as the proposed action is in a previously disturbed area. The proposed action is in compliance with the Act.

Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. 703 et seq.)

[The Migratory Bird Treaty Act established “that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not.”]

Example:

The proposed action is in compliance with the Act. The project footprint is almost completely devoid of suitable habitat that would support migratory bird nesting. Foraging and feeding birds would likely avoid the area entirely due to increased levels of noise and human disturbance during the construction phase. Although project activity would occur during the breeding season of migratory bird species, migratory bird nesting, feeding, and foraging would not be affected.

National Environmental Policy Act of 1969, as amended, (42 U.S.C. 4321 et seq.)

[NEPA requires federal agencies to assess the environmental effects of their proposed actions prior to decision making. This EA has been prepared following CEQ NEPA Regulations (40 CFR 1500-1508), and the USACE regulations (33 CFR 230) and guidance (ER 200-2-2 and EC 1165-2-200), and satisfies the NEPA requirement.]

National Historic Preservation Act of 1966, as amended (54 U.S.C. 300101 et seq.)

[Section 106 of the NHPA requires federal agencies to take into account the effects of their actions on historic properties and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such actions (54 U.S.C. 306108).]

Example:

Cultural resource review of the undertaking identified a historic component consisting of XXXX, located within the Area of Potential Effect, or APE. This historical alignment has not been individually assessed for its eligibility for inclusion in the National Register of Historic Places. For the proposed undertaking within the APE, it was treated as eligible, and would be avoided. Therefore, “No Adverse Effect” to historic properties is anticipated from the undertaking (see Memorandum for Record from archaeologist dated XXXX and response from (State) SHPO included herein).

Noise Control Act of 1972, as amended (42 U.S.C. 4901 et seq.)

[The Noise Control Act established a national policy to promote an environment for all Americans free from noise that jeopardizes their health or welfare.]

Example:

Noise emission levels at the location of the proposed action would increase above current levels temporarily due to this action; however, appropriate measures will be taken to keep the noise within the compliance levels.

## 5.2 Executive Orders (E.O.)

E.O. 11988, Floodplain Management

[E.O. 11988 requires that each agency “avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative”.]

Example:

The proposed action is not a major Federal action significantly affecting the quality of existing environmental resources. The project would not modify the existing floodplain or flow conveyance capacity of the constructed flood control channel or induce development within the floodplain. This action complies with the Floodplain Management Executive Order.

E.O. 11990, Protection of Wetlands

[E.O. 11990 directs federal agencies to “minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands.” Although E.O. 11990 does not apply to the issuance by federal agencies of permits to private parties for activities involving wetlands on non-federal property, it does apply to activities involving wetlands on federal property.]

Example:

The proposed action would have no impact on jurisdictional waters or wetlands of the United States because they do not occur, therefore, the proposed action complies with the Protection of Wetlands Executive Order.

E.O. 12898, 13990, 14008, and 14096 Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Example:

In section 3.12 of this EA, the USACE determined the Proposed Action would not result in disproportionate and adverse human health and environmental effects and hazards on minority and/or low-income populations and would be in compliance with E.O. 12898, 13990, 14008, and 14096.

# 6.0 LIST OF PREPARERS

[Include a list of all the people who wrote the document. This list should state their names, along with their qualifications (e.g., title, expertise, experience) and what section(s) of the document they wrote. Formatting this as a table is typically effective.]

# 7.0 REFERENCES

[Pick a citation format and stick with it. Please use in-text parenthetical references throughout the document, do not use footnotes.]

##### Appendix A: Public Notice

##### Appendix B: ENVIRONMENTAL JUSTICE (epa, ceq)

##### Appendix C: cultural resource (NHPA, TRIBAL, SHPO)