

3.0.1 Introduction to the Impact Analysis

This chapter describes the existing environmental conditions in the project area, the thresholds used to determine the significance of potential impacts, the construction and operational impacts that could occur due to the *2020 LA River Master Plan*, measures to mitigate impacts that are identified as significant, and potential cumulative impacts. The thresholds that have been identified to determine the significance of project impacts are based on the environmental checklist questions in Appendix G of the State CEQA Guidelines; where agencies that have jurisdiction over resources that could be affected by the proposed Project have established specific quantifiable thresholds, those thresholds have been used in addition to Appendix G to determine the significance of project impacts.

3.0.1.1 Organization of the Environmental Analysis

The notice of preparation (NOP) and public responses to the NOP were used to identify those impacts requiring further analysis in this chapter (Appendix A includes the NOP and NOP comments). This chapter is organized by the following resource topics:

- Section 3.1, *Aesthetics*
- Section 3.2, *Air Quality*
- Section 3.3, *Biological Resources*
- Section 3.4, *Cultural Resources*
- Section 3.5, *Energy*
- Section 3.6, *Geology, Soils, and Paleontological Resources*
- Section 3.7, *Greenhouse Gas Emissions*
- Section 3.8, *Hazards and Hazardous Materials*
- Section 3.9, *Hydrology and Water Quality*
- Section 3.10, *Land Use and Planning*
- Section 3.11, *Mineral Resources*
- Section 3.12, *Noise*
- Section 3.13, *Population and Housing*
- Section 3.14, *Public Services*
- Section 3.15, *Recreation*

- Section 3.16, *Transportation*
- Section 3.17, *Tribal Cultural Resources*
- Section 3.18, *Utilities/Service Systems*
- Section 3.19, *Wildfire*

Due to the absence of agricultural and forestry resources in the study area, the NOP eliminated this resource topic from detailed study in the PEIR.

3.0.1.2 Format of the Environmental Analysis

Each of the environmental resource sections presented in this chapter contains the following subsections:

- **Environmental Setting**
 - **Geographic Setting.** This subsection presents a description of the baseline physical environmental conditions in the vicinity of the proposed Project with respect to the environmental resource topics. Baseline environmental conditions are the physical conditions that existed at the time of publication of the proposed Project's NOP (July 7, 2020).
 - **Regulatory Setting.** This subsection describes the relevant laws and regulations that apply to the environmental resource in the study area and the governmental agencies responsible for enforcing those laws and regulations.
- **Environmental Impact Analysis.** This subsection evaluates the potential for the proposed Project to adversely affect the physical environment described in the environmental setting. Significance criteria for evaluating environmental impacts are defined for each resource topic and based on Appendix G of the State CEQA Guidelines. As noted above, only the significance thresholds that are relevant to the specific subtopics identified for each environmental resource as needing further study in the PEIR are used in the impact analysis. The impact analysis concludes by determining the significance of the respective impacts from the proposed Project. The environmental impact analysis discussion for each resource topic is organized into the following sections:
 - Typical Projects
 - Common Elements
 - Multi-Use Trails and Access Gateways
 - Six Kit of Parts
 - KOP Category 1: Trails and Access Gateways
 - KOP Category 2: Channel Modifications
 - KOP Category 3: Crossings and Platforms
 - KOP Category 4: Diversions
 - KOP Category 5: Floodplain Reclamation
 - KOP Category 6: Off-Channel Land Assets

- Overall *2020 LA River Master Plan* Implementation
- Cumulative Impacts

Chapter 2, *Project Description*, describes the Typical Projects, kit of part categories, and overall *2020 LA River Master Plan* in detail. The regulatory setting and approach to the cumulative impacts analysis for all the resource topics are described in detail below.

3.0.1.3 Impact Determinations in this PEIR

As described in Chapter 1, *Introduction*, the impact analysis in the PEIR is at a program level because the exact location and design of projects under the *2020 LA River Master Plan* have not yet been determined. As such, impact determinations presented in this PEIR could change once specific information for later activities or subsequent projects is known. Therefore, a conclusion of a significant and unavoidable impact determination in this PEIR does not preclude a less-than-significant impact determination for subsequent project approvals, if supported by substantial evidence.

3.0.1.4 County and Non-County Impact Determinations

The analysis in this chapter includes impact determinations under CEQA for the *2020 LA River Master Plan* that are applicable to all 18 jurisdictions in the study area, including the County and non-County jurisdictions (17 cities). Except for significant and unavoidable impacts, all identified significant environmental effects of the proposed *2020 LA River Master Plan* can be avoided or reduced to a less-than-significant level if the mitigation measures identified in this PEIR are implemented. These mitigation measures will be implemented for subsequent projects that are carried out by the County. Because some later activities under the *2020 LA River Master Plan* would not be carried out by the County, the County cannot enforce or guarantee that the mitigation measures would be incorporated. Therefore, where this PEIR concludes a less-than-significant impact for later activities carried out by the County, the impact would be significant and unavoidable when these activities are not carried out by the County.

3.0.2 Cumulative Impacts

3.0.2.1 Introduction

Cumulative impacts analysis for each of the resource topics in Sections 3.1 through 3.19 are also presented in their respective sections of this chapter.

3.0.2.2 Regulatory Setting and Approach to Cumulative Impacts Analysis

According to State CEQA Guidelines Section 15130(a)(1), a “cumulative impact” consists of an impact that is created as a result of the combination of the project evaluated in the environmental impact report (EIR) together with other projects causing related impacts. As stated in State CEQA Guidelines Section 15130(a)(1), the cumulative impacts discussion in an EIR need not discuss impacts that do not result in part from the project evaluated in the EIR. Therefore, those thresholds

of significance that result in no adverse impacts from a proposed project are not required to be subjected to cumulative impact analysis.

Section 15355 of the State CEQA Guidelines defines cumulative impacts as two or more individual effects that, when considered together, are considerable and may compound or increase other environmental impacts. Cumulative impacts can result from individually minor, but collectively significant, projects occurring over a period of time (Section 15355(b)). Section 15130 of the State CEQA Guidelines stipulates that EIRs must consider the significant environmental effects of a proposed project as well as its contribution to cumulative impacts when the project's incremental effect is cumulatively considerable. Per Section 15065(a)(3), *cumulatively considerable* means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. The standards for "significant" or "cumulatively considerable" are based on the established significance thresholds for each resource area. Per Sections 15130(b)(1)(B) and 15130(d), consistency with the projections or requirements of previously approved local, regional, statewide, or planning documents may also be a guide to determining whether a project's impact is cumulatively significant.

State CEQA Guidelines Section 15130(b) identifies the following elements as necessary for an adequate discussion of cumulative effects:

- Cumulative context in the form of a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document that has been adopted or certified and that described or evaluated regional or area-wide conditions contributing to the cumulative impact.
- The geographic scope of the area affected by the cumulative effect and a reasonable explanation for the geographic limitation used.
- A summary of the expected environmental effects to result from those projects with specific reference to additional information stating where that information is available.
- A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

The cumulative impacts analysis considers both short-term construction effects and long-term effects of the *2020 LA River Master Plan* over a 25-year horizon. Both construction and operations cumulative impacts are discussed in each resource topic, though not under separate headings in this program-level analysis because sufficient information—such as specifics related to detailed phasing, duration, opening year, and operations and maintenance—is not available for construction and operation of all projects proposed under the overall *2020 LA River Master Plan*. Therefore, the discussion is kept together. These impacts may not be apparent in the near term, but they may evolve into adverse impacts in the long term. According to the State CEQA Guidelines, the discussion and evaluation of cumulative impacts need not be as detailed as the discussion of environmental impacts attributable to the proposed Project alone. Additionally, the discussion should be guided by the standards of practicality and reasonableness. Beneficial impacts are also considered in this analysis of cumulative impacts. Beneficial cumulative impacts of the *2020 LA River Master Plan* could be associated with increased recreational opportunities and community and trail connectivity as well as flood management improvements.

There are two ways to address the question of which related actions should be considered in the context of past, present, and reasonably foreseeable actions when considered with the proposed Project. State CEQA Guidelines Section 15130(b) specifically identifies the following methodologies:

1. A “list of past, present, and probable future projects producing related or cumulative impacts,” or
2. A “summary of projections contained in an adopted local, regional, or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative impact. Such plans may include: a general plan, regional transportation plan or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified environmental document for such a plan.”

For this PEIR, related plans and programs with a potential to contribute to cumulative impacts were analyzed using the “projection” methodology (i.e., the second methodology identified above). Therefore, the cumulative impacts analysis for each resource area considers impacts related to general growth projected for the area, as well as policies and programs that are in place (i.e., adopted) to protect and conserve environmental resources (e.g., biological resources and water quality) and minimize resulting impacts on human health. It should be noted that if the *2020 LA River Master Plan* is found to have *no impact* for a particular significance criterion, then there would be no cumulative impact either and no discussion pertaining to that significance criterion.

3.0.2.3 Past, Present, and Reasonably Foreseeable Related Actions

Comprehensive land use planning for the region is provided by the Southern California Association of Governments (SCAG), as well as county and city general plans, which local governments are required by State law to prepare as a guide for future development. The regional plans and programs for land use and mobility were consulted for planned future conditions. The *Los Angeles County General Plan* and the SCAG 2020–2045 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) (*Connect SoCal*) provide information on trends as well as forecasts relevant to the cumulative impact analysis for specific disciplines. The regional growth forecast represents the most likely growth scenario for the Southern California region in the future, taking into account a combination of recent and past trends, reasonable key technical assumptions, and regional growth policies. The regional growth forecast is completed through collaboration among the various stakeholders. In addition to regional growth forecasts, the California Department of Finance provides annual growth projections.

Through a literature review and contribution from Steering Committee members, Chapter 7 of the *2020 LA River Master Plan* identifies more than 1,800 LA River Watershed enhancement projects that are currently proposed or planned by stakeholders within the watershed. These projects have been identified for the entire LA River Watershed. Some of these projects are within the *2020 LA River Master Plan* study area, while others are outside that geographic context and cover a much larger geographic area.

For purposes of this PEIR, the geographic boundary considered in the environmental analysis varies depending on the type of resource considered. For instance, impacts related to air quality would be regional because the emissions from construction and operation of the Project would not be restricted to the immediate project area. Consequently, the cumulative impact analysis considers environmental impacts within the South Coast Air Basin (Basin). Greenhouse gas (GHG) emissions,

similarly, are cumulative and global in nature. Generally, however, the cumulative impacts analysis considers the geographic scope to include the study area and beyond as relevant, and reflects consideration of whether the Project would cause a new significant cumulative impact or result in a cumulatively considerable contribution to a previously identified significant cumulative impact included in an adopted local, regional, or statewide plan.

The California Department of Finance provides population projections annually. Table 3-1 summarizes the population estimates for Los Angeles County for 2020–2040, covering the majority of the 25-year planning period for the *2020 LA River Master Plan* in 5-year increments. Population growth estimates are not yet available for 2045, the horizon year of the *2020 LA River Master Plan*; however, based on the growth trends over 20 years (Table 3-1), it is not anticipated that the population growth would be substantial by 2045.

Table 3-1. Department of Finance Population Growth Estimates (Los Angeles County)

2020	2025	2030	2035	2040
10,257,557	10,314,467	10,380,446	10,386,380	10,335,448

Source: California Department of Finance, Projections

The discussion below describes the plans, programs, and projections, and the context in which the proposed Project may contribute to potential cumulative impacts.

Southern California Association of Governments Regional Comprehensive Plan

SCAG is designated by the federal government as the Southern California region’s Metropolitan Planning Organization and Regional Transportation Planning Agency. SCAG’s jurisdiction includes Los Angeles, Orange, Riverside, San Bernardino, Imperial, and Ventura Counties. SCAG addresses regional planning through various plans and programs, including the 2008 Regional Comprehensive Plan (RCP).

The RCP addresses regional issues, such as housing, traffic/transportation, water, and air quality, and serves as an advisory document to local agencies in the Southern California region to use when preparing local plans and handling local issues of regional significance. These policies represent ideas that should be considered for general plan updates and development projects. The RCP contains the following land use and housing, open space and habitat, transportation, and air quality goals that are relevant to a discussion of land use impacts for the proposed Project:

- Land Use and Housing
 - Successfully integrate land and transportation planning and achieve land use and housing sustainability.
- Open Space and Habitat
 - Ensure a sustainable ecology by protecting and enhancing the region’s open space infrastructure and mitigate growth- and transportation-related impacts on natural lands by:
 - Conserving natural lands that are necessary to preserve the ecological function and value of the region’s ecosystems;
 - Conserving wildlife linkages as critical components of the region’s open space infrastructure; and

- Coordinating transportation and open space to reduce transportation impacts on natural lands.
- Transportation
 - A more efficient transportation system that reduces and better manages vehicle activity.
 - A cleaner transportation system that minimizes air quality impacts and is energy efficient.
- Air Quality
 - Reduce emissions of criteria pollutants to attain federal air quality standards by prescribed dates and State ambient air quality standards as soon as practicable.
 - Reverse current trends in GHG emissions to support sustainability goals for energy, water supply, agriculture, and other resource areas.
 - Expand green building practices to reduce energy-related emissions from developments to increase economic benefits to businesses and residents.

SCAG Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy)

On May 7, 2020, SCAG’s Regional Council adopted *Connect SoCal (2020–2045 RTP/SCS)* for federal transportation conformity purposes only. The Regional Council approved *Connect SoCal* on September 4, 2020. *Connect SoCal* is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. *Connect SoCal* charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. The goals of *Connect SoCal* fall into four core categories: economy, mobility, environment, and healthy/complete communities. The 2020–2045 *Connect SoCal* goals are as follows:

1. Encourage regional economic prosperity and global competitiveness.
2. Improve mobility, accessibility, reliability, and travel safety for people and goods.
3. Enhance the preservation, security, and resilience of the regional transportation system.
4. Increase person and goods movement and travel choices within the transportation system.
5. Reduce GHGs and improve air quality.
6. Support healthy and equitable communities.
7. Adapt to a changing climate and support an integrated regional development pattern and transportation network.
8. Leverage new transportation technologies and data-driven solutions that result in more efficient travel.
9. Encourage development of diverse housing types in areas that are supported by multiple transportation options.
10. Promote conservation of natural and agricultural lands and restoration of habitats.

SCAG projects that the region will add 3,672,000 people, 1,621,000 households, and 1,660,000 jobs over the RTP/SCS planning horizon (2016–2045). Total projected population growth for Los

Angeles County through 2045 is 11,674,000 people. Historically, the SCAG region's population growth has dramatically outpaced that of the U.S.—1.7 percent compared to 1.1 percent for the period from 1970 to 2000. However, since 2000, average annual growth rates in the region have been comparable with those of the U.S. at roughly 0.8 percent annually (SCAG 2020). Slow growth is expected to continue for the region for the foreseeable future, through the entire planning period of the *2020 LA River Master Plan*. However, while growth rates are at a historic low, this still results in gradual increases to the total population.

Los Angeles County General Plan

The *Los Angeles County General Plan* was adopted by the Los Angeles County Board of Supervisors on October 6, 2015. The general plan provides the policy framework for how and where the unincorporated County will grow through the year 2035, while recognizing and celebrating the County's wide diversity of cultures, abundant natural resources, and status as an international economic center. The general plan discusses new housing and jobs within the unincorporated areas in anticipation of population growth in the County and the region. The Land Use Element provides strategies and planning tools to facilitate and guide future development and revitalization efforts. In accordance with the California Government Code, the Land Use Element designates the proposed general distribution and general location and extent of uses and serves as a blueprint for how land will be used to accommodate growth and change in the unincorporated areas. The general plan Land Use Policy Map and Land Use Legend serve as the "blueprint" for how land will be used to accommodate growth and change in the unincorporated areas. Land use policies for projects within unincorporated Los Angeles County along the LA River would be relevant to the proposed Project.

The general plan's growth forecast is from the SCAG 2012 RTP. The projections do not account for unforeseen future events or changes in general plan policies. The plan projects growth in population of 1,399,500 by 2035, an increase of 33 percent compared to 2008 data.

Local Jurisdictions' General Plans

Cumulative growth assumptions for the incorporated cities use the growth projections contained in SCAG's RTP/SCS. Each of the 17 other jurisdictions along the river's extent has an adopted general plan, for which an EIR was certified. Each of the applicable general plans covers various horizon planning periods ranging from 2010 to 2040 and contains goals and policies directed at mitigating or avoiding environmental impacts on various environmental topics (please see individual resource sections for a list of goals and policies relevant to the particular resource topic). While each of these general plans is subject to periodic updates, projects under the *2020 LA River Master Plan* would be consistent with these goals and policies with few, if any, exceptions, as noted in Section 3.10, *Land Use and Planning*. The EIRs for these general plans may also contain mitigation measures designed to reduce impacts of development under the general plan. These mitigation measures would be applied, as applicable, as projects are proposed under the individual general plans. These mitigation measures would play an important role in mitigating potential significant impacts from future development within these jurisdictions.

2016 Air Quality Management Plan

The project area lies within the Los Angeles County portion of the Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD has jurisdiction over an area of approximately 10,743 square miles, including all of Orange County, Los Angeles

County (except for the Antelope Valley), the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The Basin is a sub-region of SCAQMD's jurisdiction. Although air quality in this area has improved, the Basin requires continued diligence to meet air quality standards.

SCAQMD has adopted a series of air quality management plans (AQMPs) to meet the California Ambient Air Quality Standards and National Ambient Air Quality Standards (NAAQS). These plans require, among other emissions-reducing activities, control technology for existing sources, control programs for area sources and indirect sources, a SCAQMD permitting system that allows no net increase in emissions from any new or modified (i.e., previously permitted) emission sources, and transportation control measures. The most recent publication is the 2016 AQMP, which is intended to serve as a regional blueprint for achieving the NAAQS for healthful air.

The 2016 AQMP represents a thorough analysis of existing and potential regulatory control options and includes available, proven, and cost-effective strategies to pursue multiple goals in promoting reductions in GHG emissions and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The 2016 AQMP focuses on demonstrating NAAQS attainment dates for the 2008 8-hour ozone standard, the 2012 annual particulate matter 2.5 microns or less in diameter (PM_{2.5}) standard, and the 2006 24-hour PM_{2.5} standard. The 2016 AQMP includes both stationary and mobile-source strategies to ensure that rapidly approaching attainment deadlines are met, public health is protected to the maximum extent feasible, and the region is not faced with burdensome sanctions if the NAAQS are not met by the established date (SCAQMD 2017).

SCAQMD published the CEQA Air Quality Handbook in November 1993 to help local governments analyze and mitigate project-specific air quality impacts. This handbook provides standards, methodologies, and procedures for conducting air quality analyses as part of CEQA documents prepared within SCAQMD's jurisdiction. In addition, SCAQMD has several supplemental documents, including *Air Quality Significance Thresholds* (2019), *Localized Significance Threshold Methodology* (2003, revised 2008), and *Final Methodology to Calculate Particulate Matter (PM) 2.5 and PM_{2.5} Significance Thresholds* (2006). These documents provide guidance for evaluating localized effects from mass emissions. All three were used in the preparation of this analysis (SCAQMD 2006, 2008, 2019).

The Project is also required to comply with all applicable SCAQMD rules and regulations pertaining to construction activities including, but not limited to, the following:

- **SCAQMD Rule 402—Nuisance:** This rule prohibits the discharge of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, endanger the comfort, repose, health, or safety of any such persons or the public, or cause, or have a natural tendency to cause, injury or damage to business or property. Odors are regulated under this rule.
- **SCAQMD Rule 403—Fugitive Dust:** This rule prohibits emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area that remains visible beyond the property line of the emission's source. During construction, best available control measures identified in the rule would be required to minimize fugitive dust emissions from proposed earthmoving and grading activities. These measures would include site pre-watering and re-watering as necessary to maintain sufficient soil moisture content. Additional requirements apply to construction projects on properties with 50 or more acres of disturbed surface area or any earthmoving operation with a daily earthmoving or throughput volume of 5,000 cubic yards

or more three times during the most recent 365-day period. These requirements include submittal of a dust control plan, maintenance of dust control records, and designation of an SCAQMD-certified dust control supervisor.

- **SCAQMD Rule 1108—Cutback Asphalt:** This rule specifies volatile organic compound content limits for cutback asphalt.
- **SCAQMD Rule 1113—Architectural Coatings:** This rule specifies volatile organic compound content limits for architectural coatings.
- **SCAQMD Rule 1403—Asbestos Emissions from Demolition/Renovation Activities:** This rule specifies work practices to limit asbestos emissions from building demolition and renovation activities including the removal and disturbance of asbestos-containing material. This rule is generally designed to protect uses surrounding demolition or renovation activity from exposure to asbestos emissions.
- **SCAQMD Rule 1470—Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines:** This rule specifies requirements for stationary diesel engines, including emergency standby generators. It requires owners or operators of emergency standby generators to keep monthly logs of usage, limits maintenance and testing to 20 hours per year, and requires emission rates to not exceed 0.40 gram per brake-horsepower hour.

Metro's Our Next LA Long Range Transportation Plan (Draft, 2020)

Metro's *2020 Long Range Transportation Plan* (LRTP), titled *Our Next LA*, was adopted by the Metro Board of Directors on September 24, 2020. It is the first update to the LRTP since 2009 and provides a vision for transportation in Los Angeles County through 2047. The plan aims to address population growth, changing mobility needs and preferences, technological advances, equitable access to opportunity, and adaptation to a changing environment. The plan details construction of an additional 100 miles of fixed-guideway transit, investments in arterial and freeway projects to reduce congestion, and construction of regional-scale bicycle and pedestrian projects to increase active transportation, including the Rail to Rail Active Transportation Corridor and the LA River Path. Other efforts detailed in the plan include traffic management practices for congested roadways (e.g., Express Lanes toll lanes), maintaining and upgrading the existing transportation system for all modes, and partnering with local, State, and federal agencies and the private sector. *Our Next LA* includes transit and highway improvements funded by Measure M, as well as expansions of off-peak transit service, of the active transportation network, and of programs such as Express Lanes; partnerships to provide bus-only lanes and freight management policies; and bold policy proposals, including free transit, faster bus trips, and sub-regional congestion pricing. The updated LRTP will serve as a blueprint for how Metro will spend anticipated revenues in the next 30 years. The 2020 Draft LRTP projects a population growth of 1.7 million people between 2020 and 2047 (Metro 2020).