

CHAPTER 3

Project Impacts and Mitigation Measures

3.0 Introduction to Environmental Analysis

This chapter describes the relevant environmental and regulatory setting; identifies the significance criteria and thresholds relied upon in the analysis; and evaluates the direct, indirect, and cumulative environmental impacts of the Permanente Creek Restoration Plan (PCRP) to determine whether its implementation could result in one or more new significant impacts or a substantial increase in the severity of any significant impacts previously identified in the 2012 EIR. Based on the explanation provided in Section 2.3, *Focus of the Supplemental EIR*—including as summarized in Table 2-4, *Specific Areas of Focus for the Supplemental EIR*—the analysis of Project impacts in this chapter focuses on PCRP Reaches 6–13, 17, and 18 as key areas for evaluation specifically for seven resource areas: air quality, biological resources, cultural resources, energy conservation, geology and soils, greenhouse gas emissions, and hydrology and water quality. The remaining resource areas included in the CEQA Guidelines Appendix G Environmental Checklist are addressed in Section 3.8, *Project Consistency with 2012 EIR*. This initial section of Chapter 3 introduces key concepts and the framework for the analysis of potential resource impacts in this chapter.

3.0.1 Environmental Baseline

CEQA requires that an EIR “include a description of the physical environmental conditions in the vicinity of the project” (CEQA Guidelines Sections 15125[a] and 15126.2[a]). This environmental setting as of the date of the notice of preparation normally constitutes the baseline physical conditions by which a lead agency determines whether an impact would be significant. However, when a supplemental EIR (SEIR) is prepared, the lead agency’s scope of environmental review is limited to whether the existing EIR is sufficient or whether further analysis is needed (CEQA Guidelines Sections 15162 and 15163). If further analysis is needed, then it is included in the SEIR. In the context of an SEIR, the CEQA baseline is adjusted such that the originally approved project is assumed to exist. Therefore, this SEIR analyzes the impacts of the PCRP by comparing existing conditions plus the PCRP against existing conditions plus the 2012 Reclamation Plan Amendment and 2012 EIR, and the creek restoration plans evaluated therein.

The mitigation measures imposed by the County in the context of the 2012 EIR are ongoing obligations for Lehigh. Compliance with those measures is enforceable by the County independent of its consideration of the PCRP. Because the 2012 mitigation measures are part of the baseline condition for this SEIR for purposes of CEQA, they are being carried forward (unchanged). See **Appendix H1**, *Summary of Impacts and Mitigation Measures for the 2012 Permanente Quarry Reclamation Plan Amendment*. Other conditions of approval for the 2012

approvals that would be implemented or occur as part of the baseline conditions for the PCRCP are set forth in **Appendix H2**, *2012 Conditions of County Approval*.

3.0.2 Types of Impacts

Impacts analyzed are either project-specific or cumulative. The terms “direct impacts,” “indirect impacts,” and “cumulative impacts” are defined below, consistent with CEQA Guidelines Sections 15064(d) and 15355.

Direct and Indirect Impacts: Project impacts can be direct or indirect. Examples of direct physical changes in the environment (i.e., direct impacts) include dust, noise and odors generated during construction, or the loss of sensitive biological habitat due to grading and excavation during project construction or operation. An indirect physical change in the environment (i.e., an indirect impact) is not immediately related to the project, but flows from it. Stated another way, if a direct physical change in the environment in turn causes another change in the environment, then the other change is an indirect physical change in the environment. For example, the construction of new utility capacity may facilitate population growth in the service area due to the increased capacity, and that growth may in turn lead to an increase in air pollution. An indirect physical change is considered only if that change is a reasonably foreseeable consequence of the project. A change that is speculative or unlikely to occur is not reasonably foreseeable.

Cumulative Impacts: A cumulative impact occurs when two or more individual impacts, when considered together, are considerable or that compound or increase other environmental impacts, even if the individual effects of either one would not. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. The scenarios used for defining and analyzing cumulative impacts are discussed in Section 3.0.5.

3.0.3 CEQA Significance Criteria and Determinations

CEQA lead agencies rely on impact significance criteria as benchmarks to determine whether changes to the existing environment caused by a project or an alternative would cause a significant adverse effect. CEQA defines a significant impact on the environment as “a substantial, or potentially substantial, adverse change in the environment” (Public Resources Code Section 21068), and the CEQA Guidelines further clarify that a significant impact is a substantial adverse change “in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance” (14 Cal. Code Regs. Section 15382). To guide the County Planning Department (as the lead agency for the PCRCP) in determining whether the Project or an alternative may cause a significant impact on the environment, the preparers of this SEIR (who are identified in Chapter 5, *Report Preparation*) have considered the series of questions routinely considered by the County pursuant to its own environmental checklist as well as those provided in CEQA Guidelines Appendix G. Case law interpreting CEQA has recognized that lead agencies generally have broad discretion to formulate significance thresholds and to draw significance conclusions based on information in the record for a particular project activity, including the impact’s setting: “For example, an activity which may not be significant in an urban area may be significant in a rural area” (CEQA Guidelines Section 15064(a)(1)(b)). Impact conclusions reached in this SEIR are made based on information

in the County's official record, including credible science-based research, reference materials, and informed professional judgments of qualified scientists and SEIR preparers. Technical studies and analyses relied upon are cited in each section of the SEIR; additional Project-specific or site-specific analyses are provided in the appendices. Materials relied upon have been published, peer-reviewed, or independently reviewed on the County's behalf. They follow applicable protocols and otherwise are believed to be appropriate for consideration in the SEIR. Representatives of the County and members of the County's environmental consultant team who have the relevant professional credentials and experience independently reviewed all applicant-provided studies and technical reports on behalf of the County. All impact determinations are projections based on the expectation that the described impacts, or lack thereof, would occur if the Project or an alternative is approved and implemented.

The categories used to designate impact significance in the 2012 EIR were:

- **No Impact.** There would be no impact if there is no Project-caused change in the environment (for example, if the environmental resource does not occur within the Project site or the area of potential effect). For example, there would be no impact related to tree removal if no tree removal is proposed in the Project site.
- **Less than significant.** This determination applies if a Project-caused change would result, but that it would not exceed the applicable significance threshold.
- **Less than significant with mitigation incorporated.** This determination applies if the Project would result in an adverse impact that meets or exceeds the applicable significance threshold, but feasible mitigation is available that would eliminate any adverse impact or reduce it to a less-than-significant level.
- **Significant and unavoidable.** This determination applies if the Project would result in an adverse effect that meets or exceeds the applicable significance threshold but, even with the implementation of mitigation measures to lessen the impact, if available, the residual effect would remain significant.

In the context of this SEIR, the categories used to designate impact significance are whether the Project would cause any **new significant impact** or **substantially increase the severity of a significant impact** previously disclosed and evaluated in the 2012 EIR.

3.0.4 Mitigation Measures

As discussed in Section 3.0.1, *Environmental Baseline*, mitigation measures imposed as part of the 2012 EIR are part of the analytical baseline for this SEIR. Where the PCRCP could result in a change in the baseline physical environment (including with the implementation of the 2012 EIR mitigation measures and conditions of approval) such that a new significant impact or a substantial increase in the severity of a previously identified significant impact could result, this SEIR identifies one or more new mitigation measures, the implementation of which could reduce the severity of the impact below established thresholds. Detailed analyses of impacts and the identification of mitigation measures specific to the PCRCP are contained in this chapter.

3.0.5 Cumulative Effects Analysis

3.0.5.1 Cumulative Considerations in this SEIR

CEQA Guidelines Section 15130 requires a discussion of the cumulative impacts of a project when the project's incremental contribution to a significant cumulative effect is "cumulatively considerable." This means that the project's incremental effects are considerable when viewed in connection with the effects of past, current, and probable future projects. An incremental, project-specific contribution to a cumulative impact is less than cumulatively considerable and is not significant if, for example, the project is required to implement or fund its fair share of a mitigation measure(s) designed to alleviate the cumulative impact.

Consistent with CEQA, the analysis of potential cumulative impacts is "guided by the standards of practicality and reasonableness" (CEQA Guidelines Section 15130(b)). The purpose of the cumulative analysis is to allow decision-makers to better understand the impacts that might result from approval of past, present, and reasonably foreseeable future projects, in conjunction with the Project addressed in this SEIR.

The CEQA Guidelines advise that a discussion of cumulative impacts should reflect both their severity and the likelihood of their occurrence (CEQA Guidelines Section 15130(b)). Consistent with CEQA Guidelines Section 15130(b), the lead agency has prepared a list of past, present, and reasonably foreseeable future projects that could result in related or cumulative impacts. This list includes projects outside the control of the lead agency. The analysis of cumulative impacts also considers projections contained in planning documents designed to evaluate regional or area-wide conditions. Existing conditions within the cumulative impacts area of effect reflect a combination of the natural condition and the effects of past actions in the affected area. The following factors also were used to determine an appropriate list of projects to be considered in this cumulative analysis:

- **Similar Environmental Impacts** – The analysis considers "reasonably foreseeable" projects that would contribute to effects on resources also affected by the Project in the vicinity of the Project site.
- **Geographic Scope** – The appropriate geographic area of cumulative analysis is identified for the resource areas of focus in this SEIR as dictated by relevant physical and/or environmental boundaries. Where the relevant geographic scope has not changed subsequent to the 2012 EIR, the information is not repeated. For ease of reference, however, **Table 3.0-1** summarizes the different geographic areas used to evaluate cumulative impacts.
- **Timing and Temporal Scope** – Incremental impacts of the Project could combine with the incremental impacts of other projects to cause or contribute to cumulative effects if the Project's periods of activity or ongoing impacts would coincide in terms of timing with the effects of the other projects in the cumulative scenario. Where the relevant temporal scope has not changed subsequent to the 2012 EIR, the information is not repeated.

**TABLE 3.0-1
GEOGRAPHIC CONSIDERATIONS IN CUMULATIVE ANALYSIS**

Resource Area	Geographic Area
Aesthetics	Viewshed from U.S. 101 in Project vicinity
Air Quality	San Francisco Bay Area Air Basin and North Central Coast Air Basin
Biological Resources	Habitat Plan Area
Cultural Resources and Tribal Cultural Resources	Project site and vicinity
Energy	Countywide
Geology, Soils, and Paleontological Resources	Project site and vicinity in areas with similar soil and geologic conditions
Greenhouse Gases	Statewide
Hazards and Hazardous Materials	Project site, adjacent parcels, and truck hauling routes
Hydrology and Water Quality	Permanente Creek watershed, groundwater basins in the vicinity of the Project site
Mineral Resources	Countywide
Noise and Vibration	Project site and adjacent parcels
Transportation/Traffic	Adjacent roadways and highways
Utilities and Service Systems	Unincorporated County areas
Wildfire	Countywide, including in accordance with fire hazard maps prepared by the California Department of Forestry and Fire Protection (CAL FIRE) as part of the Fire and Resource Assessment Program (FRAP) (CAL FIRE 2022).

3.0.5.2 Characterization of Cumulative Effects Conclusions in this SEIR

The analysis documented in the 2012 EIR determined whether the 2012 Reclamation Plan Amendment, including the creek restoration activities proposed for implementation within the PCRA, would cause or contribute to any cumulatively significant impact and, if so, whether the contribution would be “cumulatively considerable” as defined by CEQA Guidelines Section 15065(a)(3). The analysis in this SEIR focuses on whether changes to the earlier-described project (i.e., the restoration plan refinements described in the Amended Consent Decree [Appendix B] and Updated 90% Design Memo [Appendix C]) would cause any new significant impact or any substantial increase in the severity of a significant impact already disclosed and evaluated in the 2012 EIR.

3.0.5.3 Cumulative Scenario

Section 6.1 of the Draft 2012 EIR (at page 6-2 et seq.) summarized the projects considered in the cumulative effects analysis for the 2012 EIR. Because the geographic scope of the 2012 Reclamation Plan Amendment, nature of potential direct and indirect effects, and the duration of the reclamation activities analyzed were more extensive than the change to that project reflected in the Updated 90% Design Memo that is the subject of this SEIR, the cumulative projects list in the 2012 EIR was predictably more extensive. For this SEIR, **Table 3.0-2** identifies a list of

projects that have potential to be part of the cumulative scenario. To identify them, the lead agency solicited input from agencies and others during the scoping process about past, other present, and reasonably foreseeable future projects that would cause impacts that could overlap with those of the PCRCP. Table 3.0-2 also describes the approximate geographic location and timing of effects of each of the potentially cumulative projects. These projects include a range of project types. They primarily consist of infrastructure and capital improvement projects, as well as private site development projects. These projects are considered reasonably likely to be constructed and/or operated in a similar timeframe as the PCRCP and could contribute incremental impacts that are similar to those of the PCRCP. Because a number of the projects identified as cumulative projects are market-driven and/or have yet to be fully funded, the status and construction dates are not certain. Therefore, for the purposes of this cumulative analysis, the lead agency assumes they would cause impacts concurrently with this Project.

**TABLE 3.0-2
CUMULATIVE PROJECTS LIST**

Project Name	Location	Approximate Distance from Project Site (miles)	Project Description	Status and Estimated Schedule
Transportation demand strategies at Rancho San Antonio Open Space Preserve	Rancho San Antonio Open Space Preserve	0.5	Phased implementation of transportation demand management strategies designed to encourage alternative modes of transportation to the preserve.	Implemented in phases over several years; no confirmed plan/scope/timeline
Permanente Creek Trail	Charleston Road and Amphitheatre Parkway, City of Mountain View	6.5	Two creek crossings in the North Bayshore area.	Project is substantially complete
Colony Street Connection to Permanente Creek Trail	Colony Street, City of Mountain View	6.5	Pedestrian/bike bridge across Permanente Creek.	In design
McKelvey Park	McKelvey Park, City of Mountain View	4.5	Baseball park acts as a stormwater basin for creek flows and was done in partnership with Valley Water.	Complete
Permanente Creek Widening and New Bike/Ped Bridge	1860-2159 Landings Drive, City of Mountain View	6.5	Improvements to Permanente Creek and its riparian habitats through widening of the creek and restoration of native vegetation to support local biodiversity. A pedestrian-bicycle path is proposed along the eastern side of Permanente Creek and would connect to a new east-west pedestrian/bicycle bridge over the creek.	Approved

SOURCES: Midpeninsula Regional Open Space District 2021, City of Mountain View 2021

The County Planning Department received Lehigh’s application for a proposed 2019 Reclamation Plan Amendment. However, the proposal became the subject of litigation and was withdrawn. The County Planning Department has determined that it is reasonably foreseeable that Lehigh will submit a new application for a Reclamation Plan Amendment while the CEQA process for

the PCRCP is underway. Nonetheless, the details of a potential future application cannot be known with sufficient specificity to evaluate them as part of the cumulative effects analysis for the proposed creek restoration plan evaluated in this SEIR.

The U.S. Fish and Wildlife Service (USFWS) approved the Lehigh Permanente Site Operation and Maintenance Low-Effect Habitat Conservation Plan (LEHCP) and accompanying incidental take permit in 2022 for a 20-year permit term (GEI Consultants, Inc. 2022; USFWS 2022a, 2022b). The LEHCP includes portions of PCRCP Reaches 8–12 and provides measures to protect the California red-legged frog from activities including stormwater capture/sedimentation basin operation and maintenance, erosion control, material transport, vehicle and equipment operation, and road and vegetation maintenance. Monarch butterfly host plant and nectar plant surveys also are required.

In addition to the previous project list, the Santa Clara County General Plan 1995-2010 (County of Santa Clara 1994), San Benito County 2035 General Plan (County of San Benito 2015), and Santa Clara Valley Habitat Plan (County of Santa Clara et al. 2012) were reviewed for potential future development projects, new roadway corridors, or changes in allowed development patterns that could result in cumulative impacts. None were identified in the Project vicinity. The surrounding area is General Plan designated and zoned for agricultural, rangeland, and open space uses—similar to existing conditions at the Project site and in the vicinity. The location of the California High-Speed Rail Authority stations and alignment were considered (components are proposed approximately 3 miles north of the Project site) and impacts related to biological resources are discussed. Significant, specific land use changes that would impact the cumulative scenario due to the Sargent Ranch Quarry project are not expected in the Project site.

3.0.6 References

- California Department of Forestry and Fire Protection (CAL FIRE), 2022. Fire Hazard Severity Zone Viewer, accessed February 3, 2022, with a focus on Santa Clara County.
- City of Mountain View, 2021. Email communication with Stephanie Williams, Planning Manager/Zoning Administrator, June 18, 2021.
- County of San Benito, 2015. *San Benito County 2035 General Plan*. July 21, 2015. <https://edcsanbenito.org/wp-content/uploads/2019/10/Adopted-2035-GPU-2.pdf>.
- County of Santa Clara, 1994. *Santa Clara County General Plan, 1995-2010*. December 20, 1994. <https://plandev.sccgov.org/ordinances-codes/general-plan>.
- County of Santa Clara, City of San Jose, City of Morgan Hill, City of Gilroy, Santa Clara Valley Water District, Santa Clara Valley Transportation Authority, 2012. *Santa Clara Valley Habitat Plan*. August 2012. <https://scv-habitatagency.org/178/Santa-Clara-Valley-Habitat-Plan>.
- GEI Consultants, Inc., 2022. *Low-Effect Habitat Conservation Plan Permanente Site Operation and Maintenance*. May 2022.

Midpeninsula Regional Open Space District, 2021. Email communication with Xucan Zhou, Planner II, June 15, 2021.

U.S. Fish and Wildlife Service (USFWS), 2017. Response to U.S. Army Corps of Engineers request for initiation of formal consultation on the proposed Permanente Creek Restoration Project (Corps file number 2008-00356), August 9, 2017.

USFWS, 2021. Email communication with Joseph Terry, Senior Fish and Wildlife Biologist, June 28, 2021. USFWS, 2022a. Formal Consultation on the Issuance of a Section 10(a)(1)(B) Incidental Take Permit for the Lehigh Southwest Cement Company's Permanente Site Operation and Maintenance Project Low-Effect Habitat Conservation Plan, Santa Clara County, California. May 27, 2022.

USFWS, 2022b. Findings and Recommendations Regarding the Issuance of Federal Fish and Wildlife Permit (ESPER004426) to Lehigh Southwest Cement Company to Allow Incidental Take of the California Red-legged Frog as a Result of the Low-Effect Habitat Conservation Plan for the Permanente Site Operation and Maintenance Project in Santa Clara County, California. June 15, 2022.