CHAPTER 2 ENVIRONMENTAL EFFECTS OF THE PROJECT

Approach to Analysis

Environmental and Regulatory Setting

As described in Chapter 1, "Project Description," this draft SEIR has been prepared subsequent to the 2011 GPU PEIR and evaluates and discloses the environmental impacts related to implementation of the CAP Update, which is a mitigation requirement of the 2011 GPU PEIR. Each of the resource sections that follow begins with a description of applicable environmental and regulatory settings that represent the conditions against which potential impacts are evaluated. The environmental and regulatory settings for this SEIR are based on information in the 2011 GPU PEIR but have been updated to reflect physical environmental and regulatory changes over time.

Where the setting information provided in the 2011 GPU PEIR remains applicable to the analysis of the CAP Update, it is incorporated by reference in the resource section. Where changes to the environmental or regulatory setting (e.g., new information, regulatory changes) are relevant to understanding the CAP Update's potential impacts, updated or additional background information is provided in the draft SEIR resource sections. In accordance with State CEQA Guidelines Section 15125, the discussions of the environmental setting focus on information relevant to the issue under evaluation. The baseline conditions for this draft SEIR are generally consistent with the 2008 environmental baseline that was used in the 2011 GPU PEIR. (Refer to Table 1-13 in Chapter 1, "Project Description," of the 2011 GPU PEIR [page 1-59], which summarizes the baseline year for each issue and is hereby incorporated by reference.) The 2011 GPU PEIR is available for reference on the County's website: https://www.sandiegocounty.gov/content/sdc/pds/gpupdate/environmental.html.

Evaluation of Effects

The setting description in each section is followed by a discussion of impacts and mitigation.¹ In this draft SEIR, each impact discussion is divided into two parts: "Guidelines for Determination of Significance" and "Impact Analysis." The "Impact Analysis" section presents a summary of the impact discussion and conclusion in the 2011 GPU PEIR and an evaluation of the environmental impacts of the CAP Update. Relevant adopted mitigation measures from the 2011 GPU PEIR are applied, and new mitigation measures are described, where needed to feasibly address residual environmental impacts. Each impact evaluation concludes with a summary that presents an impact determination.

The thresholds used to determine the level of significance of the environmental impacts for each resource topic are provided in each resource section, in accordance with State CEQA Guidelines Sections 15126, 15126.2, and 15143. These thresholds are based on the County's published Guidelines for Determining Significance, updated as appropriate

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¹ "Impacts" and "effects" are used interchangeably in CEQA.

to reflect the example questions provided in Appendix G of the State CEQA Guidelines, best available data, and applicable regulatory standards. In turn, impact statements are based on the thresholds of significance and are prefaced by a number in bold-faced type.

The impact evaluations in this SEIR update the 2011 GPU PEIR assessments to reflect the anticipated impacts of the project. The discussion includes the analysis, rationale, and substantial evidence upon which conclusions are drawn. The level of significance for each impact is determined by comparing the impacts of physical changes anticipated with implementation of the CAP Update (the project) to the environmental setting, with a focus on how the subsequent projects that may be associated with implementation of the CAP Update strategies, measures, and actions could change the significance of the impacts. As appropriate, these discussions identify whether adopted General Plan policies and 2011 GPU PEIR mitigation measures would address the potential impacts and include a statement regarding whether there would be a new significant effect and/or if the impact could be more severe than the impact identified in the 2011 GPU PEIR.

A "less-than-significant" impact is one that would not result in a substantial adverse change in the physical environment. A "potentially significant" impact or "significant" impact is one that would result in a substantial adverse change in the physical environment; both are treated the same under CEQA in terms of procedural requirements and the need to identify feasible mitigation. In accordance with State CEQA Guidelines Section 15364, "feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors. Where mitigation measures are identified, a discussion of impact significance with the implementation of these measures follows.

As noted above, 2011 GPU PEIR mitigation measures are applied to the CAP Update as appropriate to avoid or minimize the impacts of its implementation. Additional mitigation measures are identified, as needed and feasible, to avoid, minimize, rectify, reduce, or compensate for significant or potentially significant impacts, in accordance with the State CEQA Guidelines Section 15126.4. A list of applicable mitigation measures follow the impact analyses and are compiled in Chapter 8 of this SEIR. The degree to which the identified mitigation measure(s) would reduce the impact is also described.

Environmental effects that are not evaluated in detail in this chapter are discussed in Chapter 3, "Environmental Effects Found Not To Be Significant."

Chapter 4, "Other CEQA Sections," presents an analysis of the CAP Update's growth-inducing impacts, as required by State CEQA Guidelines Section 15126, as well as a summary of significant and unavoidable impacts and significant and irreversible environmental changes that could occur as a result of the CAP Update. Chapter 4 also includes a discussion of the cumulative effects of other projects before the County that would modify the adopted General Plan through a General Plan amendment ("in-process GPAs").

For an evaluation of alternatives to the project that could reduce environmental effects, the reader is referred to Chapter 5, "Alternatives," which presents a reasonable range of

alternatives and evaluates the environmental effects of those alternatives relative to the CAP Update, as required by Section 15126.6 of the State CEQA Guidelines. Chapter 5 also includes the smart growth alternatives analysis.

Buildout Assumptions

2011 General Plan

The buildout projections used in the evaluation of the General Plan in the 2011 GPU PEIR were based on a population forecast model that was developed by the County and that identified the population capacity associated with buildout of the General Plan land use map. The number of residential units that would result from buildout pursuant to the General Plan land use map was calculated by multiplying acreage by allowed density, after accounting for factors such as areas with existing development, areas reserved for public right-of-way, and areas with physical and environmental constraints.

The County's population model forecasted a buildout population of 678,270 with 235,861 housing units under the proposed land use map (approximately 15 percent fewer units than the previous general plan because lower-density development was identified for areas with land use constraints, such as those that lack sufficient infrastructure and services or that are prone to safety concerns, such as wildfires). The General Plan focused development in Village cores to retain the county's rural character, shifted 20 percent of the remaining dwelling unit capacity to the most western portions of the unincorporated area, and located 80 percent of the dwelling unit capacity where water can be imported and distributed by the San Diego County Water Authority.

As discussed in further detail below, the buildout assumptions under the General Plan that were evaluated in the 2011 GPU PEIR represent a conservative estimate of population growth in the unincorporated county. Given changes in regional population forecasts, changes in market conditions, and recent development patterns, the 2011 GPU PEIR forecast model no longer represents a realistic picture of buildout capacity in the unincorporated county. Therefore, the CAP Update and this SEIR analysis rely on the San Diego Association of Governments (SANDAG) population projections as a more current and realistic estimate of development potential in the unincorporated county. The rationale to consider the SANDAG estimates as a more realistic projection is provided below.

San Diego Association of Governments

SANDAG estimates and forecasts population, housing, and employment for all jurisdictions in the San Diego region, including the unincorporated county. As noted above, SANDAG's population projections were used in the CAP Update forecasting. SANDAG's population projections are based on data from the US Census Bureau, as well as SANDAG employment, population, and housing estimates for 18 cities and the unincorporated county. These projections reflect the Regional Housing Needs Assessment (RHNA) process for the San Diego region, which is overseen by SANDAG. The RHNA process identifies the need for housing and guides land use planning by addressing existing and future housing needs resulting from population, employment, and household growth.

SANDAG also builds and maintains a regional travel demand model that is used to forecast transportation metrics within the region. Travel demand models use input data such as land uses (population/employment), roadway and transportation network data, and socioeconomic information to understand existing and future travel behavior. The model is validated and calibrated to a "base year" to represent existing conditions as closely as possible. As part of the development of the 2021 Regional Transportation Plan/Sustainable Communities Strategy (2021 Regional Plan), SANDAG modeled several different scenarios using an activity-based model referred to as Activity-Based Model Version 2+, or ABM2+. Each scenario includes different land use and regional growth forecast assumptions developed by SANDAG regarding the location and amount of future residential and non-residential growth in the region, the location and type of future transportation investments that would be made in the region (e.g., highway improvements, public transit infrastructure and operations), and assumptions about future transportation policies and behaviors that would be in place in the region (e.g., the costs of owning and operating a vehicle, the rate of teleworking by employees). The population, housing, and employment forecast for the CAP Update was based on SANDAG's 2021 Regional Plan EIR (SANDAG 2021) Alternative 2 growth assumption (land use data set "DS" 39 scenario) because it most closely resembled observed patterns of growth. The County has reviewed the underlying assumptions of the DS 39 scenario and confirmed that the 2016 estimates are representative of current (2019) conditions based on dwelling unit construction history in the unincorporated county and reasonably anticipated transportation investments.²

The population, housing, and employment projections were calculated by subtracting the population in Marine Corps Base Camp Pendleton and on tribal reservations from the total for the unincorporated county, because the County has no jurisdiction over these lands. For the purpose of the analysis in this draft SEIR, the 2050 population is projected to be 505,485, and the number of residential units is projected to total 191,208 in 2050. These forecast population numbers are scaled down from the maximum development capacity assumed in the County's General Plan and 2011 GPU PEIR to reflect a more realistic projection of development that is anticipated to occur in unincorporated San Diego County through 2050. The appropriateness of this reduced projection of future population and housing growth within the county, which assumes nearly 173,000 fewer people and 45,000 fewer residential units than the General Plan buildout projections, was verified through an independent market study prepared for unincorporated San Diego County (see Appendix 3 to the CAP Update). This market study identified reasonably foreseeable development based on an understanding of housing growth considering population growth expectations, physical site conditions, market factors derived from historical trends, and current regulatory capacity. Two projections were prepared: a Base Growth estimate based on housing and population trends (in which a portion of units planned in specific plan areas would build out), and a High Growth estimate that adds an allowance for development of all the entitled but unbuilt specific plan area units, which include previously adopted General Plan amendment (GPA projects). These countyspecific market projections were closely aligned with the SANDAG forecast in the DS 39

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The County tracks progress towards implementing the General Plan through the Housing Production and Capacity Portal. The portal was accessed in July 2023 here: https://www.sandiegocounty.gov/content/sdc/pds/HPCP-UA.html.

scenario. The Base Growth estimate projects a slightly higher 2050 population (540,504) than SANDAG and approximately 1,000 fewer units than the SANDAG projections (188,849). Based on all these considerations, the SANDAG model is considered a reasonable estimate of population growth.

Evaluation of Project Elements

As described in Chapter 1, "Project Description," the project includes the proposed CAP Update (which consists of strategies, measures, and actions to reduce GHG emissions); modifications to the General Plan and 2011 GPU PEIR to make them consistent with the CAP Update; and revisions to the County's GHG Threshold and Guidelines for Determining Significance (i.e., the CAP Consistency Checklist). As detailed further below, the project elements that could result in physical environmental effects consist of the proposed GHG reduction strategies, measures, and actions that would be implemented under the CAP Update. The GHG reduction strategies, measures, and actions that are applicable to future projects are incorporated into the CAP Consistency Checklist; and a project's compliance with the Checklist is intended to demonstrate that it meets the County's GHG Threshold. The GPA for the project (i.e., amendments to Goal COS-20 and Policy COS-20.1) and the GHG Guidelines for Determining Significance and GHG Threshold are combined in the overall impact analysis of the CAP Update, and conclusions regarding the impact of future projects that meet the GHG Threshold are supported by the substantial evidence contained in this SEIR.

CAP Update Measures and Actions

Implementation of the proposed GHG reduction strategies, measures, and actions under the CAP Update is the main component of the project evaluated in this SEIR, because as noted above, these represent the component of the project that could result in physical impacts on the environment. The overarching strategies and associated measures and actions proposed in the CAP Update encompass a range of potential tactics, from proposed ordinances, plans, and support of legislation to specific programs designed to reduce GHG emissions in the unincorporated county and from County operations. Implementation of all CAP Update measures and actions was considered during preparation of this draft SEIR, to the degree specific information about implementation is known. However, the analysis focuses on the measures and actions with the potential to result in physical environmental impacts, as indicated in Table 1-2 in Chapter 1, "Project Description." Further, this draft SEIR does not speculate about the potential site-specific physical impacts that could occur if and when a specific site improvement is proposed in the future at a site location still to be determined. This approach is supported by State CEQA Guidelines Section 15145, Speculation, which directs that if the County finds, after thorough investigation, that an impact is too speculative for evaluation, the County should note its conclusion and terminate discussion of the impact. Rather, this SEIR considers the types of impacts that could occur with implementation of future projects that are anticipated to directly or indirectly result from implementation of the proposed GHG reduction measures and actions.

Consistency Modifications to the General Plan and 2011 GPU PEIR

The CAP Update, and the targets and strategies identified therein, result in necessary changes to General Plan Goal COS-20 and Policy COS-20.1 and mitigation adopted in the 2011 GPU PEIR (Mitigation Measures CC-1.2, CC-1.7, and CC-1.8) in order to attain consistency with current legislative requirements. These changes require a GPA, specific to Goal COS-20 and Policy COS-20.1, as part of the approval process. This draft SEIR evaluates the GPA as part of the actions associated with the CAP Update because the changes reflected in the GPA support, and are consistent with, implementation of the CAP Update and its GHG targets and GHG reduction strategies. Because its impacts are included in the overall impact analysis of the CAP Update, the GPA is not addressed as a separate impact discussion in the resource sections that follow.

In addition, the County prepared additional potential GPAs to goals and policies to further reduce vehicle miles traveled (VMT) and other impacts as part of the Appellate Court-directed smart growth alternatives. These additional GPAs could be selected by the Board of Supervisors, in whole or in part, to further reduce impacts from VMT and other impacts evaluated in the 2011 GPU PEIR. These GPAs would also reduce impacts from the CAP Update. These are evaluated as a smart growth alternative in Chapter 5, "Alternatives," and are not part of the project GPA to Goal COS-20 and Policy COS-20.1.

Guidelines for Determining Significance and GHG Threshold

This draft SEIR also evaluates impacts associated with the implementation of the proposed *County of San Diego Guidelines for Determining Significance: Climate Change* and GHG Threshold. These elements of the proposed project represent updates to existing County standards to reflect the CAP Update. The proposed GHG Threshold is "consistency with the CAP." This threshold can be met by projects that are consistent with the growth forecast used in the CAP Update that would apply all applicable GHG reduction measures in the CAP Update. The CAP Update demonstrates that the proposed measures and actions applied to projected growth would not considerably contribute to climate change. Therefore, projects that are consistent with the CAP Update would be determined to result in a less-than-significant GHG impact (see CEQA Guidelines Section 15183.5(b)).

To achieve consistency, a project must implement the applicable GHG reduction measures and actions outlined in the CAP Update, the implementation of which is evaluated throughout this draft SEIR. Adoption of a GHG Threshold that establishes a requirement to be consistent with the CAP Update does not require a separate impact analysis, because the impacts of establishing that threshold, and what it would take to meet the threshold, have been fully evaluated.

The County of San Diego Guidelines for Determining Significance: Climate Change would provide direction to project applicants regarding how a project could achieve consistency with the CAP Update. The guidelines are proposed to include the CAP Consistency Checklist, which applicants would be required to use to demonstrate how a project would be consistent with the CAP Update, including through implementation of GHG reduction measures and

actions. The specific actions that would result from the proposed changes to the guidelines would be project-specific implementation of approved GHG reduction measures and actions, the environmental impacts of which are evaluated throughout this draft SEIR.

Scope of Analysis

This draft SEIR is programmatic in nature. It analyzes the potential environmental effects of all GHG reduction measures and actions but does not specifically analyze individual projects or actions resulting from implementation of the CAP Update, because the details of such projects and actions are not yet available (e.g., specific location of infrastructure). This is consistent with the requirements of State CEQA Guidelines Section 15152, related to programmatic analyses used for tiering.

Although CEQA coverage is provided on the program of activities proposed under the CAP Update, specific GHG reduction measures and actions would require subsequent implementation actions by the County and/or project applicants. When the County implements (or requires implementation of) specific activities proposed under the CAP Update, a determination would be made as to whether such actions are consistent with the activities identified in the CAP Update, and whether sufficient evaluation of the potential environmental impacts associated with these later activities has been provided in this draft SEIR. These later activities would be examined in light of the information in this draft SEIR to determine whether additional environmental documentation must be prepared.

During this examination, if the County finds, consistent with the direction provided in State CEQA Guidelines Section 15162, that no new significant effects are identified or no new mitigation measures would be required to avoid or minimize the effects of a subsequent project, the activity can be approved as being within the scope of the project covered by this draft SEIR. In this situation, the County must incorporate all relevant project requirements and all feasible mitigation measures from the SEIR into the later activity to address significant or potentially significant effects on the environment.

If a subsequent project or later activity would have significant effects that were not examined in this SEIR, the County would determine the appropriate environmental document to be prepared. If an additional environmental document is needed and a mitigated negative declaration or supplement to this draft SEIR is prepared, the SEIR can be used to simplify the task of preparing the follow-up environmental document by allowing the County to focus on the issues that were not previously addressed in the SEIR, as indicated in State CEQA Guidelines Section 15168(d).

Environmental Resources Evaluated

The CAP Update is a comprehensive plan for reducing community GHG emissions in the unincorporated county, as well as the GHG emissions from County operations. This chapter evaluates the following 15 resource topics in detail based on the environmental issues considered in the 2011 GPU PEIR and Appendix G of the State CEQA Guidelines,

as amended, as well as public comment and direction provided by the Superior Court of San Diego County:

- aesthetics
- agriculture and forestry resources
- air quality
- biological resources
- cultural and paleontological resources
- energy
- environmental justice
- greenhouse gas emissions

- hazards and hazardous materials
- hydrology and water quality
- land use and planning
- noise
- transportation
- tribal cultural resources
- wildfire

In accordance with State CEQA Guidelines Section 15128, Chapter 3, "Environmental Effects Found Not to Be Significant," of this draft SEIR provides the reasons why some environmental impacts were not considered significant and, therefore, are not analyzed in detail.

Cumulative Impact Assessment Overview

CEQA requires that an EIR evaluate a project's cumulative impacts. Cumulative impacts are a project's impacts combined with the impacts of other related past, present, and reasonably foreseeable future projects. An assessment of cumulative impacts examines whether individual effects may increase in scope or intensity when considered together. As set forth in the State CEQA Guidelines, the discussion of cumulative impacts must reflect the severity of the impacts, as well as the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone. As stated in CEQA Section 21083(b)(2), a project may have a significant effect on the environment if "the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

Section 15130(a) of the State CEQA Guidelines states that an EIR shall discuss cumulative impacts of a project when the project makes a cumulatively considerable contribution to an existing significant cumulative impact or would result in a new cumulative impact. "Cumulatively considerable" means the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. If an incremental effect is not cumulatively considerable, such an effect is not required to be considered significant; however, the reasoning for a determination of why such effects are not significant shall be provided by the lead agency. Implementation of appropriate mitigation measures can reduce a project's contribution to impacts to less than cumulatively considerable, as allowed by CEQA.

Scope of the Cumulative Analysis

The cumulative impact analysis provided in this SEIR evaluates whether the proposed CAP Update could result in new significant cumulative impacts or an increase in the severity of the cumulative impacts that were identified in the 2011 GPU PEIR. The State CEQA Guidelines identify two basic methods for establishing the cumulative environment in which the project is to be considered: (1) the use of a list of past, present, and probable future projects or (2) the use of adopted projections from a general plan, other regional planning document, or a certified EIR for such a planning document. This analysis is based on the second approach.

The cumulative environmental setting has been updated from the 2011 GPU PEIR based on the development forecasts in SANDAG's 2021 Regional Plan EIR (SANDAG 2021) Alternative 2 DS 39 model (including military bases, tribal reservations, and 18 incorporated cities). As explained above, the County has determined that the DS 39 modeling scenario represents a reasonably foreseeable pattern and rate of growth. Because it assumes less ambitious VMT reduction programs and growth limitations than the Regional Plan, the model provides an appropriately conservative picture of cumulative growth, VMT, and associated GHG emissions.

Cumulative Impact Analysis Methodology

For purposes of this SEIR, the project would have a significant cumulative effect if it meets either one of the following criteria:

- The cumulative effects of related projects (past, current, and probable future projects) without the project are not significant, but the project's incremental impact is substantial enough, when added to the cumulative effects, to result in a new significant impact.
- The cumulative effects of related projects (past, current, and probable future projects) without the project are already significant, and the project represents a considerable contribution to the already significant effect. The standards used herein to determine "considerable contribution" are that the impact either must be substantial or must exceed an established threshold of significance.

The cumulative analysis first discloses whether there is a significant impact in the cumulative condition. As appropriate, based on the topic and reasonably available information, quantitative evaluation of the cumulative condition is presented. The analysis then discusses the incremental increase in the potential severity of the impact with implementation of the CAP Update. The significance criteria used for analysis are the same as those used throughout the topical sections of this chapter. State CEQA Guidelines Section 15130(a)(3) states that a project's contribution to an impact is "less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures to alleviate the cumulative impact. The lead agency shall identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable." The geographic scope considered for the cumulative analysis varies depending on the environmental issue area being discussed.

Therefore, a description of the geographic scope for each environmental issue analyzed in this Draft SEIR is provided in individual sections of this chapter.

As noted in Chapter 1 of this draft SEIR, a list-based analysis of the cumulative effects of implementation of (unapproved) in-process GPAs in combination with the proposed project is included in Chapter 4 of this draft SEIR in response to the Court of Appeal decision.