

2.15 Global Climate Change

This section summarizes information from the *Air Quality/Global Climate Change Analysis* (RBF 2012) prepared for the proposed Project, included as Appendix C of this SEIR, and evaluates existing conditions for greenhouse gases (GHG) relative to the Project areas addressed in this SEIR, as well as the potential GHG effects associated with Project implementation.

2.15.1 Existing Conditions

The adequacy of the existing conditions information for this environmental topic as provided in the General Plan Update Program EIR has been confirmed through re-checking of the references pertaining to this section in Chapter 5.0 of the General Plan Update Program EIR, including all relevant listed persons, plans, policies, and websites. In addition, this information has been confirmed through consultation/interviews with appropriate County or other agency staff, as available, that were involved in the preparation/review of this section of the General Plan Update Program EIR and/or supporting technical studies; all of these sources are listed in Chapter 6.0 of the General Plan Update Program EIR. The existing conditions information for this environmental topic as provided in the General Plan Update Program EIR applies equally to the Project areas addressed in this SEIR, and is therefore not repeated here.

2.15.2 Regulatory Framework

Since the adoption of the General Plan, the County of San Diego adopted a Climate Action Plan (CAP) on June 2012 to address the issues of growth and climate change, and to safeguard the environment for residents and visitors. The CAP includes strategies that show compliance with the California Air Resources Board Scoping Plan for local governments, which is to achieve a reduction of 15% below current levels by 2020.

The CAP was designed to support the following primary functions:

- Mitigate the impacts of climate change by achieving meaningful GHG reductions within the County, consistent with Assembly Bill (AB) 32, the Governor's Executive Order S-3-05, and CEQA guidelines.
- Allow lead agencies to adopt a plan or program that addresses the cumulative impacts of a project.
- Provide a mechanism that subsequent projects may use as a means to address GHG impacts under CEQA, in accordance with the 2011 statement by the Attorney General.
- Comply with the 2011 adopted County General Plan Update Program EIR, Mitigation Measure CC-1.2, Preparation of a CAP.

Except for the adoption of the CAP, the regulatory framework discussion in the General Plan Update Program EIR as pertains to climate change has not changed since adoption of the General

Plan Update in August 2011. Therefore, the regulatory framework applies equally to the Project areas addressed in this SEIR, and is therefore not repeated here.

2.15.3 Analysis of Project Effects and Cumulative Impacts

For the cumulative impact analyses, the geographic scope for each of the issues below would be the same as described and evaluated in the General Plan Update Program EIR, and as updated in Section 1.9 of this SEIR (Cumulative Project Assessment Overview).

2.15.3.1 Compliance with AB 32

This section describes potential direct and cumulative impacts associated with Project compliance with AB 32, as pertains to the Project areas addressed in this SEIR.

Guidelines for the Determination of Significance

CARB has authority to regulate GHG emissions as necessary to meet the emission reduction goals of AB 32. This may include establishing GHG emission reduction requirements for new land use projects and recommendations for Statewide GHG significance thresholds for CEQA studies; however, the CARB has not yet acted on either item.

CEQA gives a lead agency the discretion to determine the significance of environmental impacts identified in its CEQA documents. The County of San Diego has not yet adopted guidelines for determining significance for climate change, but has issued interim guidance for discretionary projects and published draft guidelines for determining significance for GHG impacts. Based on the current guidance from the County, in order for a project to not conflict with the goals and strategies of AB 32, the County needs to reduce GHG emissions to 1990 levels by 2020. The GPU EIR selected achievement of 1990 emission levels by 2020 as the GHG emissions significance threshold.

Since the adoption of the General Plan, the County of San Diego adopted a CAP on June 2012 to address the issues of growth and climate change, and to safeguard the environment for residents and visitors. The CAP includes strategies that show compliance with CARB's Scoping Plan for local governments, which is to achieve a reduction of 15% below current levels by 2020. The CAP is the mechanism by which the County will utilize to ensure that the proposed Project is consistent with AB 32.

Impact Analysis

The General Plan Update Program EIR determined that buildout under the General Plan would result in potentially significant direct and cumulative impacts related to compliance with AB 32. These impacts would be reduced to below a level of significance through the implementation of a combination of federal, State and local regulations; existing County regulatory processes; the adopted General Plan goals and policies; and, specific mitigation measures/ implementation programs identified in the General Plan Update Program EIR.

Similar direct and cumulative impacts related to compliance with AB 32 would occur with the proposed Project. As noted in the Project's *Air Quality/Global Climate Change Analysis* (RBF 2012), the proposed Project would result in an increase in development within the unincorporated County lands; however, much of this future growth would be concentrated within town centers, such as in the community of Alpine. As such, the Project would result in development that is more consistent with applicable General Plan goals and policies relative to GHGs. For example, Goal LU-5 addresses climate change impacts by creating land use plans and associated development techniques and patterns with the intent of reducing local GHG emissions to 1990 levels by 2020. Therefore, the Project's potentially significant direct and cumulative impacts related to compliance with AB 32 would be reduced to below a level of significance by the same regulations, implementation programs (General Plan Update goals/policies) and mitigation measures from the General Plan Update Program EIR and repeated in Section 2.15.4.7 (Mitigation for Climate Change) below.

2.15.3.2 *Potential Effects of Global Climate Change on the Proposed Project*

This section describes potential direct and cumulative impacts associated with the potential effects of global climate change on the proposed Project as pertains to future development of sensitive receptors (e.g., residential, daycare facilities) within the Project areas addressed in this SEIR.

Guidelines for the Determination of Significance

Currently, no thresholds or guidelines exist for the determination of significance of the effects of global climate change on a project; therefore, in the absence of published thresholds, global climate change would have a significant effect if it would subject development of sensitive receptors (e.g., residential, daycare facilities) associated with the proposed Project to substantial climate-related risks to public health or safety.

Impact Analysis

The General Plan Update Program EIR determined that buildout under the General Plan would result in potentially significant direct and cumulative impacts related to potential effects of global climate change. These impacts would be reduced to below a level of significance through the implementation of a combination of federal, State and local regulations; existing County regulatory processes; the adopted General Plan goals and policies; and, specific mitigation measures/ implementation programs identified in the General Plan Update Program EIR.

Similar direct and cumulative impacts related to potential effects of global climate change would occur with the proposed Project. As noted in the Project's *Air Quality/Global Climate Change Analysis* (RBF 2012), future development of sensitive receptors (e.g., residential, daycare facilities) under the proposed Project would be exposed to general climate change effects such as decreases in available water supply, increased frequency of wildfires, increased demand for

energy as a result of the greater need for summer cooling, and impacts to public health related to increased heat, air pollution, wildfires, and infectious diseases; however, such potentially significant direct and cumulative impacts would be reduced to below a level of significance by the same regulations, implementation programs (General Plan Update goals/policies) and mitigation measures from the General Plan Update Program EIR and repeated in Section 2.15.4.7 (Mitigation for Climate Change) below.

2.15.4 Mitigation for Climate Change

2.15.4.1 Compliance with AB 32

Direct and cumulative impacts associated with Project compliance with AB 32 would be reduced to below a level of significance with implementation of the same applicable General Plan Update policies and mitigation measures as identified in the General Plan Update Program EIR, and repeated below.

General Plan Policies

Policy COS-10.7: Recycling of Debris. Encourage the installation and operation of construction and demolition (C&D) debris recycling facilities as an accessory use at permitted (or otherwise authorized) mining facilities to increase the supply of available mineral resources.

Policy COS-15.1: Design and Construction of New Buildings. Require that new buildings be designed and constructed in accordance with “green building” programs that incorporate techniques and materials that maximize energy efficiency, incorporate the use of sustainable resources and recycled materials, and reduce emissions of GHGs and toxic air contaminants.

Policy COS-15.2: Upgrade of Existing Buildings. Promote and, as appropriate, develop standards for the retrofit of existing buildings to incorporate architectural features, heating and cooling, water, energy, and other design elements that improve their environmental sustainability and reduce GHG.

Policy COS-15.3: Green Building Programs. Require all new County facilities and the renovation and expansion of existing County buildings to meet identified “green building” programs that demonstrate energy efficiency, energy conservation, and renewable technologies.

Policy COS-17.1: Reduction of Solid Waste Materials. Reduce greenhouse gas emissions and future landfill capacity needs through reduction, reuse, or recycling of all types of solid waste that is generated. Divert solid waste from landfills in compliance with State law.

Policy COS-17.5: Methane Recapture. Promote efficient methods for methane recapture in landfills and the use of composting facilities and anaerobic digesters and other sustainable strategies to reduce the release of GHG emissions from waste disposal or management sites and to generate additional energy such as electricity.

Policy COS-18.2: Energy Generation from Waste. Encourage use of methane sequestration and other sustainable strategies to produce energy and/or reduce GHG emissions from waste disposal or management sites.

Policy COS-20.1: Climate Change Action Plan. Prepare, maintain, and implement a climate change action plan with a baseline inventory of GHG emissions from all sources, GHG emissions reduction targets and deadlines, and enforceable GHG emissions reduction measures.

Policy COS-20.2: GHG Monitoring and Implementation. Establish and maintain a program to monitor GHG emissions attributable to development, transportation, infrastructure, and municipal operations and periodically review the effectiveness of and revise existing programs as necessary to achieve GHG emission reduction objectives.

Policy COS-20.4: Public Education. Continue to provide materials and programs that educate and provide technical assistance to the public, development professionals, schools, and other parties regarding the importance and approaches for sustainable development and reduction of GHG emissions.

Mitigation Measures

CC-1.1 Update the County Green Building Program to increase effectiveness of encouraging incentives for development that is energy efficient and conserves resources through incentives and education.

CC-1.3 Work with SANDAG to achieve regional goals in reducing GHG emissions associated with land use and transportation.

CC-1.4 Review traffic operations to implement measures that improve flow and reduce idling such as improving traffic signal synchronization and decreasing stop rate and time.

CC-1.5 Coordinate with the San Diego County Water Authority and other water agencies to better link land use planning with water supply planning with specific regard to potential impacts from climate change and continued implementation and enhancement of water conservation programs to reduce demand. Also support water conservation pricing (e.g., tiered rate structures) to encourage efficient water use.

CC-1.6 Implement and expand County-wide recycling and composting programs for residents and businesses. Require commercial and industrial recycling.

CC-1.7 Incorporate CARB's recommendations for a climate change CEQA threshold into the "County Guidelines for Determining Significance for Climate Change." These recommendations will include energy, waste, water, and transportation performance measures for new discretionary projects in order to reduce GHG

emissions. Should the recommendation not be released in a timely manner, the County will prepare its own threshold.

- CC-1.8** Revise “County Guidelines for Determining Significance” based on the CAP. The revisions will include guidance for proposed discretionary projects to achieve greater energy, water, waste, and transportation efficiency.
- CC-1.9** Coordinate with APCD, SDG&E, and the California Center for Sustainable Energy to research and possibly develop a mitigation credit program. Under this program, mitigation funds will be used to retrofit existing buildings for energy efficiency to reduce GHG emissions.
- CC-1.10** Continue to implement the County Groundwater Ordinance, Watershed Protection Ordinance (WPO), Resource Protection Ordinance (RPO), MSCP and prepare MSCP Plans for North and East County in order to further preserve wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas and other open space that provide carbon sequestration benefits and to restrict the use of water for cleaning outdoor surfaces and vehicles. The WPO also implements low-impact development practices that maintain the existing hydrologic character of the site to manage storm water and protect the environment. (Retaining storm water runoff on-site can drastically reduce the need for energy-intensive imported water at the site.)
- CC-1.11** Revise the Ordinance Relating to Water Conservation for Landscaping to further water conservation to:
- Create water-efficient landscapes and use water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.
 - Use reclaimed water for landscape irrigation.
 - Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.
 - Provide education about water conservation and available programs and incentives.
- CC-1.12** Continue to coordinate with resource agencies, CALFIRE, and fire districts to minimize potential wildfire risks in the County and to plan for the potential increase in future risk that may result from Climate Change.
- CC-1.13** Continue to implement and revise as necessary the Regional Trails Plan as well as the Community Trails Master Plan to connect parks and publicly accessible open space through shared pedestrian/bike paths and trails to encourage walking and bicycling.

SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

- CC-1.14** Provide public education and information about options for reducing greenhouse gas emissions. In addition to addressing land development, education should also address purchasing, conservation, and recycling.
- CC-1.15** Reduce VMT and encourage alternative modes of transportation by implementing the following measures:
- During Community Plan updates, establish policies and design guidelines that: encourage commercial centers in compact walkable configurations and discourage “strip” commercial development
 - Expand community bicycle infrastructure.
 - Revise the Off-Street Parking Design Manual to include parking placement concepts that encourage pedestrian activity and concepts for providing shared parking facilities.
 - Establish comprehensive planning principles for transit nodes such as the Sprinter Station located in North County Metro.
 - Continue to locate County facilities near transit facilities whenever feasible.
 - Coordinate with SANDAG, Caltrans, and tribal governments to maximize opportunities to locate park and ride facilities.
 - Continue to coordinate with SANDAG, Caltrans, and transit agencies to expand the mass transit opportunities in the unincorporated county and to review the location and design of transit stops. Establish a Planning and Development Services transit coordinator to ensure land use issues are being addressed.
 - Update the Zoning Ordinance to require commercial, office, and industrial development to provide preferred parking for carpools, vanpools, electric vehicles, and flex cars.
- CC-1.16** Develop and implement a Strategic Energy Plan to increase energy efficiency in existing County buildings and set standards for any new County facilities that will ultimately reduce GHG emissions. This will include implementation of the following measures as will be detailed within the Plan:
- Improve energy efficiency within existing operations through retrofit projects, updated purchasing policies, updated maintenance/operations standards, and education.
 - Improve energy efficiency of new construction and major renovations by applying design criteria and participating in incentive programs.

SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

- Provide energy in a reliable and cost-effective manner and utilize renewable energy systems where feasible.
- Monitor and reduce energy demand through metering, building controls, and energy monitoring systems.
- Increase County fleet fuel efficiency by acquiring more hybrid vehicles, using alternative fuels, and by maintaining performance standards for all fleet vehicles.

CC-1.17 Develop and implement a County Operations Recycling Program. This will include implementation of the following measures as will be detailed within the Program:

- Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.
- Recover by-product methane to generate electricity.
- Provide education and publicity about reducing waste and available recycling services.

CC-1.18 Develop and implement a County Operations Water Conservation Program.

CC-1.19 Revise the Zoning Ordinance to facilitate recycling salvaged concrete, asphalt, and rock.

CC-FCI-1 As previously mentioned the CAP includes strategies that show compliance with CARB's Scoping Plan for local governments, which is to achieve a reduction of 15% below current levels by 2020. The CAP is the mechanism in which the County will utilize to ensure that the proposed project is consistent with AB 32. This measure would be applicable to all future development in the County of San Diego as described below:

- a) If future development would meet the screening criteria listed in Table 3 of the "County Guidelines for Determining Significance for Climate Change," the project applicant would be required to complete Appendix G, *County of San Diego CAP Compliance Checklist for Greenhouse Gas Analysis* and must demonstrate compliance with at least one CAP measure beyond any applicable County standards and requirements; or,
- b) If future development would not meet the screening criteria listed in Table 3 of the "County Guidelines for Determining Significance for Climate Change," the project applicant would be required to complete Appendix G, *County of*

San Diego CAP Compliance Checklist for Greenhouse Gas Analysis and must demonstrate compliance with all of the applicable measures listed in Appendix G of the CAP for the relevant project type.

Measures included in Appendix G of the CAP include the following:

E1 Energy Efficiency for New Development

Encourage new construction to meet voluntary energy efficiency standards that are 15% above 2008 Title 24 standards (will become required in 2015).

E3 Energy Star Appliances

Replace existing appliances with Energy-Star-qualified appliances in 40% of existing homes and 95% of new homes.

E4: Smart Meters

Help County residents conserve energy by using the enhanced features of their new Smart Meters.

R1: Solar Water Heating

Install solar hot water heating systems on 19% of residential and commercial buildings.

R2: Alternative Energy Systems

Install photovoltaic (PV) systems to generate 5% of existing residential electricity and cover 5.5 million square feet of commercial owned property.

T2: Increase Biking and Walking

Increase the pedestrian and bicycle transportation mode share.

2.15.4.2 Potential Effects of Global Climate Change on the Proposed Project

Direct and cumulative impacts associated with the potential effects of global climate change on the proposed Project, as pertains to future development of sensitive receptors (e.g., residential, daycare facilities) within the Project areas addressed in this SEIR, would be reduced to below a level of significance with implementation of the same applicable General Plan Update policies and mitigation measures as identified in the General Plan Update Program EIR, and repeated above in Section 2.15.4.1.

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