2.17 Global Climate Change

This section evaluates existing climate change conditions within the PSR Analysis Areas, the former CGSP Area, and the area comprising the Valley Center Community Plan Residential Policy 8 Revision, and analyzes the potential effects of the Proposed Project on these conditions. Global climate change conditions considered in this section include greenhouse gas contributions and consistency with goals and strategies of Assembly Bill (AB) 32 and Senate Bill (SB) 32 that would result from the implementation of the Proposed Project. Information contained in this section has been incorporated from the GHG Technical Report prepared by County of San Diego (2017), included as Appendix F of this SEIR.

A summary of the global climate change impacts identified in Section 2.7.3 is provided below.

Global Climate Change Summary of Impacts

Issue Topic	Project Direct Impact	Cumulative Impact	Impact After Mitigation
Generation of Greenhouse Gas Emissions	Potentially significant	Potentially significant	Less than Significant
Conflict with Applicable Plan, Policy, or Regulation	Potentially significant	Potentially significant	Less than Significant

2.17.1 Existing Conditions

Section 2.17.1 of the 2011 PEIR included a discussion of existing conditions related to global climate change in the unincorporated County. The global climate change existing conditions described in the 2011 PEIR are similar to the existing conditions evaluated in this SEIR. This section presents additional existing global climate change conditions within the PSR Analysis Areas and the former CGSP Area that have become available since adoption of the General Plan in August 2011. All references used in the 2011 PEIR were reviewed to ensure they are still valid today, and are hereby incorporated by reference.

2.17.1.1 Greenhouse Gas Emissions

Greenhouse Gas

Constituent gases that trap heat in the Earth's atmosphere are called greenhouse gases (GHGs), which play a critical role in the Earth's radiation budget by trapping infrared radiation emitted from the Earth's surface, which would otherwise have escaped into space. Primary GHG of concern contributing to this process include methane (CH_4), carbon dioxide (CO_2), nitrous oxide (N_2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF_6). Without the natural heat-trapping effect of GHG, Earth's surface would be about 34 degrees Celsius (°C) cooler (CCAT 2006). This is a natural phenomenon, known as the "greenhouse effect," and is responsible for maintaining a habitable climate. However, anthropogenic emissions of these GHG more than natural ambient concentrations are responsible for the enhancement of the greenhouse effect, and have led to a trend of unnatural warming of the Earth's natural climate known as global warming or climate change. Emissions of these gases that induce climate change are attributable to human activities associated with industrial/manufacturing/commercial, utilities, transportation, residential, and agricultural sectors.

Global Greenhouse Gas Inventory

The global warming potential is the potential of a specific gas or aerosol to trap heat in the atmosphere. Due to the relative abundance in the atmosphere and relatively long atmospheric lifetime, carbon dioxide has been designated the reference gas for comparing the global warming potential. The 100-year potential effect of CO_2 is equal to one. Additionally, CH_4 has a potential effect of 25, indicating a 25 times greater warming effect than CO_2. When accounting for GHG, carbon dioxide equivalent (CO_2e) is the mass emissions of an individual GHG multiplied by its global warming potential. GHG are often presented in units called metric tons of CO_2e ($MTCO_2e$). Per the World Resources Institute in 2013, total worldwide GHG emissions were estimated to be 46,445 million $MTCO_2e$ and emissions per capita worldwide was 6.3 $MTCO_2e$ (WRI 2017).

U.S. Greenhouse Gas Inventory

The U.S. Environmental Protection Agency (USEPA) publication, Draft Inventory of U.S. GHG Emissions and Sinks: 1990-2015*,* provides a comprehensive emissions inventory of the nation's primary anthropogenic sources and sinks of GHG. In 2015, total U.S. GHG emissions were 6,586 million $MTCO_2e$. Overall, total U.S. emissions decreased by 2.2 percent from 2014 to 2015. The decrease from 2014 to 2015 was driven in large part by a decrease in CO_2 emissions from fossil fuel combustion (USEPA 2017).

California Greenhouse Gas Inventory

According to the California GHG Emission Inventory (2017), total GHG emissions in the State were 440.4 million $MTCO_2e$ in 2015, with 39 percent coming from the transportation sector and 23 percent from the industrial sector. On-road vehicles account for 88 percent of the transportation sector. In the industrial sector, refineries contribute 27 percent of the total emissions, and manufacturing and oil and gas production and processing contribute another 24 and 19 percent, respectively.

For comparison, California has a larger percentage of its total GHG emissions coming from the transportation sector (39 percent) than the U.S. emissions (26 percent) and a smaller percentage of its total GHG emissions from the electricity generation sector (11 percent) than the U.S. (30 percent) (CARB 2017).

San Diego County Greenhouse Gas Inventory

In addition to the California GHG inventory, the County of San Diego's ~~Draft 2017~~ Climate Action Plan (CAP) summarizes a more specific County-wide GHG inventory (County 2018~~2017~~). The GHG inventory is a detailed inventory that considers the unique characteristics of the unincorporated communities of the County and from County operations. A summary of the inventory results, by category and percent contribution for the year 2014, the most recent data available, is provided in Table 2.17-1.

In 2014, a total of 3.2 million $MTCO_2e$ was generated by the County. The largest contributor of GHGs was from the on-road transportation category, which accounted for 45 percent (1.5 million $MTCO_2e$) of the total. The second highest contributor was the electricity category, which contributed 761,000 $MTCO_2e$, or 24 percent of the total. Together the on-road transportation and electricity category comprised 70 percent of total GHG emissions for the County. The remaining amount was contributed by solid waste, natural gas consumption, agriculture, water consumption, off-road transportation, wastewater treatment, and propane consumption (County 2018~~2017~~).

2.17.2 Regulatory Framework

Section 2.17.2 of the 2011 PEIR included a discussion of regulatory framework related to global climate change in the unincorporated County, including the PSR Analysis Areas and the former CGSP Area. The regulations described in the 2011 PEIR are the same as the regulations evaluated in this SEIR, except for the following regulations discussed below and Appendix F. All references used in the 2011 PEIR were reviewed to ensure they are still valid today, and are hereby incorporated by reference.

Supreme Court Ruling of Carbon Dioxide as a Pollutant

The USEPA is the federal agency responsible for implementing the federal Clean Air Act (CAA) and its amendments. The Supreme Court of the U.S. ruled on April 2, 2007 that CO_2 is an air pollutant as defined under the CAA, and that USEPA has the authority to regulate emissions of GHGs. The ruling in this case resulted in USEPA taking steps to regulate GHG emissions and lent support for State and local agencies' efforts to reduce GHG emissions.

National Program to Cut Greenhouse Gas Emissions and Improve Fuel Economy for Cars and Trucks

On August 28, 2014, the USEPA and the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) finalized a new national program that would reduce GHG emissions and improve fuel economy for all new cars and trucks sold in the U.S. (NHTSA 2012). USEPA proposed the first-ever national GHG emissions standards under the CAA, and NHTSA proposed Corporate Average Fuel Economy standards under the Energy Policy and Conservation Act. This national program requires automobile manufacturers to build a single light-duty national fleet that meets all requirements under both federal programs and the standards of California and other states. This program will increase fuel economy to the equivalent of 54.5 miles per gallon for the fleet of cars and light-duty trucks by model year 2025, and, as of 2016, NHTSA and USEPA are developing additional phases to address GHG emission standards for new medium- and heavy-duty trucks (NHTSA 2016).

Executive Order S-3-05

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the State. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

On July 13, 2017, the California Supreme Court addressed the use of California's long-range GHG reductions goal included in EO S-3-05 as a threshold of significance in its decision, *Cleveland National Forest Foundation v. San Diego Association of Governments* (November 24, 2014) 231 Cal.App.4th 1056. The Court ruled that SANDAG did not abuse its discretion by declining "to adopt the 2050 goal as a measure of significance in light of the fact that the Executive Order does not specify any plan or implementation measures to achieve its goal." The Court emphasized the narrowness of its ruling in deciding on the sole question of use of the EO goal as a measure of significance for 2050 emissions. The Court also recognized the goal of a 40 percent reduction in 1990 GHG levels by 2030 is a "widely acknowledged" as a "necessary interim target to ensure that California meets its longer-range goal of reducing greenhouse gas emissions 80 percent below 1990 levels by the year 2050."

Assembly Bill 32, the California Global Warming Solutions Act of 2006

In September 2006, Governor Schwarzenegger signed the California Global Warming Solutions Act of 2006, AB 32. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 also requires that these reductions "…shall remain in effect unless otherwise amended or repealed. (b) It is the intent of the Legislature that the statewide greenhouse gas emissions limit continue in existence and be used to maintain and continue reductions in emissions of greenhouse gases beyond 2020. (c) The [California Air Resources Board] shall make recommendations to the Governor and the Legislature on how to continue reductions of greenhouse gas emissions beyond 2020." [California Health and Safety Code, Division 25.5, Part 3, Section 38551]

Assembly Bill 32 Climate Change Scoping Plan and Updates

In December 2008, CARB adopted its Climate Change Scoping Plan, which contains the main strategies California will implement to achieve reduction of approximately 118 million metric tons (MMT) of CO_2e emissions, or approximately 21.7 percent from the State's projected 2020 emission level of 545 $MMTCO_2e$ under a business-as-usual scenario (this is a reduction of 47 $MMTCO_2e$, or almost 10 percent, from 2008 emissions). In May 2014, CARB released and subsequently adopted the *First Update to the Climate Change Scoping Plan* to identify the next steps in reaching AB 32 goals and evaluate progress that has been made between 2000 and 2012 (CARB 2014:4 and 5). According to the update, California is on track to meet the near-term 2020 GHG limit and is well positioned to maintain and continue reductions beyond 2020 (CARB 2014: ES-2). The update also reports the trends in GHG emissions from various emissions sectors (e.g., transportation, building energy, agriculture).

On January 20, 2017, CARB released its proposed 2017 Climate Change Scoping Plan Update (2017 Scoping Plan Update), which lays out the framework for achieving the 2030 reductions as established in more recent legislation (discussed below). The proposed 2017 Scoping Plan Update identifies the GHG reductions needed by each emissions sector to achieve a Statewide emissions level that is 40 percent below 1990 levels before 2030.

The proposed update also identifies how GHGs associated with local plan-level projects could be evaluated under CEQA. Specifically, CARB recommends that local-plan level projects results in no more than 6 $MTCO_2e$ per capita by 2030 and no more than 2 $MTCO_2e$ per capita by 2050 would not result in substantial increase in GHGs or conflict with local or State plans adopted for the purpose of reducing GHG emissions. At the time of writing this environmental document, the proposed 2017 Scoping Plan Update has not been adopted.

CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, EO B-30-15, and EO S-3-05. This is confirmed in the 2017 Scoping Plan Update, which states:

> The Proposed Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Proposed Plan is developed to be consistent with requirements set forth in AB 32, SB 32, and AB 197 (CARB 2017:7).

Senate Bill 375

SB 375, signed by Governor Schwarzenegger in September 2008, aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires metropolitan planning organizations (MPOs) to adopt a sustainable communities strategy (SCS) or Alternative Planning Strategy, showing prescribed land use allocation in each MPO's Regional Transportation Plan. CARB, in consultation with the MPOs, is to provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in their respective regions for 2020 and 2035.

The SANDAG serves as the MPO for the San Diego region. SANDAG adopted its Regional Plan on October 9, 2015. The Regional Plan combines the two existing documents: the Regional Comprehensive Plan (RCP), and the Regional Transportation Plan and its Sustainable Communities Strategy (RTP/SCS). The SCS details how the region will reduce GHG emissions to state-mandated levels. SANDAG was tasked by CARB to achieve a 7 percent reduction in per capita GHGs from passenger cars and light trucks by 2020 and a 13 percent reduction by 2035, relative to emission levels in 2005. The region would achieve or exceed both reduction targets by implementing its SCS (SANDAG 2015a).

Executive Order B-30-15

On April 20, 2015 Governor Brown signed EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's EO aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union, which adopted the same target in October 2014. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32, discussed above). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2°C, the warming threshold at which major climate disruptions are projected, such as super droughts and rising sea levels.

Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a Statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles, into a single package of standards for vehicle model years 2017 through 2025. The new rules strengthen the GHG standard for 2017 models and beyond. This will be achieved through existing technologies, the use of stronger and lighter materials, and more efficient drivetrains and engines. The program's zero-emission vehicle regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. The program also includes a clean fuels outlet regulation designed to

support the commercialization of zero-emission hydrogen fuel cell vehicles planned by vehicle manufacturers by 2015 by requiring increased numbers of hydrogen fueling stations throughout the state. The number of stations will grow as vehicle manufacturers sell more fuel cell vehicles. By 2025, when the rules will be fully implemented, the statewide fleet of new cars and light trucks will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions than the Statewide fleet in 2016 (CARB [no date]).

Senate Bill X1-2, the California Renewable Energy Resources Act of 2011

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently-owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California. SB X1-2 mandates that renewables from these sources make up at least 50 percent of the total renewable energy for the 2011-2013 compliance period, at least 65 percent for the 2014-2016 compliance period, and at least 75 percent for 2016 and beyond. In October 2015, SB 350 was signed by Governor Brown, which requires retail sellers and publicly-owned utilities to procure 50 percent of their electricity from renewable resources by 2030.

California Building Efficiency Standards of 2016 (Title 24, Part 6)

Buildings in California are required to comply with California's Energy Efficiency Standards for Residential and Nonresidential Buildings established by California Energy Commission (CEC) regarding energy conservation standards and found in Title 24, Part 6 of the California Code of Regulations. These standards were first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption and are updated on an approximately 3-year cycle to allow consideration and possible incorporation of new energy efficient technologies and methods. All buildings for which an application for a building permit is submitted on or after January 1, 2017 must follow the 2016 standards (CEC 2015). Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of in landfills, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties were required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. Through other statutes and regulations, this 50 percent diversion rate also applies to State agencies. In order of priority, waste reduction efforts must promote source reduction, recycling and composting, and environmentally-safe transformation and land disposal. Per capita disposal rates for Los Angeles County are below the target disposal rates established by AB 939 (1989; California Department of Resources Recycling and Recovery [CalRecycle] 2017).

In 2011, AB 341 modified the California Integrated Waste Management Act and directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. The resulting Mandatory Commercial Recycling Regulation (2012) requires that on and after July 1, 2012, certain businesses that generate four cubic yards or more of commercial solid waste per week shall arrange recycling services. To comply with this requirement, businesses may either separate recyclables and self-haul them or subscribe to a recycling service that includes mixed waste

processing. AB 341 also established a Statewide recycling goal of 75 percent; the 50 percent disposal reduction mandate still applies for cities and counties under AB 939.

San Diego Association of Governments

SANDAG adopted its Regional Plan on October 9, 2015. The Regional Plan combines the two existing documents: the RCP, and the RTP/SCS. The SCS details how the region will reduce GHG emissions to state-mandated levels. SANDAG was tasked by CARB to achieve a 7 percent reduction in per capita GHGs from passenger cars and light trucks by 2020 and a 13 percent reduction by 2035, relative to emission levels in 2005. The region would achieve or exceed both reduction targets by implementing its SCS. The plan will be investing $200 billion in the region to create, maintain, and improve a balanced transportation network over the next 35 years (SANDAG 2015a).

County of San Diego Climate Action Plan

The County of San Diego ~~Draft 2017~~ CAP is a long-term programmatic plan that identifies comprehensive strategies and measures to reduce GHG emissions in the unincorporated communities of the County. The ~~Draft~~ CAP outlines specific reduction measures that residents and businesses can implement to reduce GHG emissions and aid the County in achieving State-mandated GHG reduction targets (County 2018~~2017~~). The ~~Draft~~ CAP also provides future developments the opportunity to use CEQA streamlining tools for analysis of GHG emissions and related impacts for projects that are consistent with the CAP. The ~~Draft~~ CAP was adopted~~has not been considered for adoption~~ by the Board of Supervisors on February 14, 2018~~at the time of this writing~~.

County of San Diego General Plan

The County of San Diego General Plan was adopted in 1978 and comprehensively updated in 2011. The strategies related to GHG emissions that were adopted as part of the 2011 General Plan Update (GPU) and are applicable to the Proposed Project include the following:

- Strategy A-1: Reduce vehicle trips generated, gasoline/energy consumption, and GHG emissions.
- Strategy A-2: Reduce non-renewable electrical and natural gas energy consumption and generation (energy efficiency).
- Strategy A-3: Increase generation and use of renewable energy sources.
- Strategy A-4: Reduce water consumption.
- Strategy A-5: Reduce and maximize reuse of solid wastes.
- Strategy A-6: Promote carbon dioxide consuming landscapes.
- Strategy A-7: Maximize preservation of open spaces, natural areas, and agricultural lands.

The 2011 GPU also includes climate adaptation strategies to address potential adverse effects of climate change. The climate adaptation strategies include the following:

- Strategy B-1: Reduce risk from wildfire, flooding, and other hazards resulting from climate change.
- Strategy B-2: Conserve and improve water supply due to shortages from climate change.
- Strategy B-3: Promote agricultural lands for local food production.
- Strategy B-4: Provide education and leadership.

County of San Diego Green Building Incentive Program

The County of San Diego Green Building Incentive Program is designed to promote the use of resource efficient construction materials, water conservation, and energy efficiency in new and remodeled residential and commercial buildings. The program offers incentives of reduced plan check turnaround time and a 7.5 percent reduction in plan check and building permit fees for projects meeting program requirements.

County of San Diego Construction and Demolition Recycling Ordinance

The Construction and Demolition Debris Ordinance is designed to divert debris from construction and demolition projects from the landfill disposal in the unincorporated County of San Diego. The ordinance requires that 90 percent of inerts and 70 percent of all other construction materials from a project be recycled. In order to comply with the ordinance, a Construction and Demolition Debris Management Plan must be submitted and a fully refundable Performance Guarantee prior to building permit issuance.

2.17.3 Analysis of Project Impacts and Determination of Significance

2.17.3.1 Issue 1: Generation of Greenhouse Gas Emissions

Guidelines for Determination of Significance

The issue of global climate change is inherently a cumulative issue, as the GHG emissions of individual projects cannot be shown to have a material effect on global climate. Thus, the project's impact to climate change is addressed as a cumulative impact.

CEQA Guidelines Section 15064 and relevant portions of Appendix G recommend that a lead agency consider a project's consistency with relevant, adopted plans, and discuss any inconsistencies with applicable regional plans, including plans to reduce GHG emissions. In Appendix G of the State CEQA Guidelines, two questions are provided to help assess if the project would result in a potentially significant impact on climate change. These questions ask whether the project would:

- generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or
- conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?

In California, some counties, cities, and air districts have developed guidance and thresholds of significance for determining significance of GHG emissions that occur within their jurisdiction. The County of San Diego is the CEQA Lead Agency for the Proposed Project and is, therefore, responsible for determining whether an impact would be considered significant.

The County's ~~Draft 2017~~2018 CAP includes GHG reduction measures that, if fully implemented, would achieve an emissions reduction target that is consistent with the State-mandated reduction targets embodied in AB 32 and SB 32. ~~If the Draft CAP is adopted and the Draft SEIR for the CAP is certified by the Board of Supervisors, t~~The CAP would be a qualified CAP as that term is used in CEQA Guidelines Section 15183.5. As part of the ~~Draft~~ CAP, the County ~~has~~ prepared the ~~Draft 2017~~2018 Guidelines for Determining Significance and Report Format and Content Requirements (Guidelines) for addressing climate change in CEQA documents (PDS ~~2017~~2018). A hard copy of this ~~draft~~ document is available at the County of San Diego, Planning & Development Services

(see Chapter 5 for web address). The following threshold of significance is included in the Guidelines that would be used to ensure consistency of new projects with the County's CAP:

> A proposed project would have a less than significant cumulatively considerable contribution to climate change impacts if it is found to be consistent with the County's Climate Action Plan; and, would normally have a cumulatively considerable contribution to climate change impacts if it is found to be inconsistent with the County's Climate Action Plan.

General Plan Amendment projects (GPAs) are analyzed in the ~~Draft~~ CAP as cumulative projects, because they are present or reasonably foreseeable future projects. As specified in mitigation measure M-GHG-1 of the CAP's ~~Draft~~ SEIR, GPAs that intensify GHG emissions beyond current designations are required to reduce GHG emissions to ensure that CAP forecasts are not substantially altered such that attainment of the GHG reduction targets and goal of the ~~Draft~~ CAP could not be achieved. ~~At the time of this writing, the Draft CAP and SEIR are not adopted or certified. Therefore, the Proposed Project would not be required to comply with a draft plan for the reduction of GHG emissions. If the CAP is adopted and the SEIR for the CAP is certified by the Board of Supervisors, then t~~The Proposed Project would be required to comply with the CAP Consistency Review Checklist and the mitigation in the CAP SEIR to reduce cumulative GHG emissions. Mitigation contained in the CAP SEIR would require a GPA that intensifies GHG emissions beyond current designations to achieve no net increase in GHG emissions from additional density above the 2011 GPU to demonstrate consistency with the CAP or to reduce all emissions to net zero (i.e., carbon neutrality). The increase in emissions shall be reduced by demonstrating compliance with relevant CAP reduction measures identified in the CAP Consistency Review Checklist, implementing all feasible onsite design features and mitigation measures, and implementing offsite mitigation, which may include purchase of carbon offsets for any remainder of GHG emissions. Therefore, if the CAP is adopted and the SEIR is certified, GPAs would comply with the threshold of significance by showing consistency with the CAP.

~~At the time of this writing, the Draft CAP has not been adopted and the mitigation framework discussed above has not been approved by the Board of Supervisors. This may result in a significant impact from the Proposed Project.~~ Based on Appendix G of the CEQA Guidelines, a project would have a significant environmental impact if it would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Neither the State of California nor the San Diego APCD has adopted emission based thresholds for GHG emissions under CEQA. The Governor's Office of Planning and Research Technical Advisory titled CEQA and Climate Change: Addressing Climate Change through CEQA Review states, "public agencies are encouraged, but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact." Furthermore, the advisory document indicates, "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice" (OPR 2008).

Project size-based screening levels have been published by the California Air Pollution Control Officers Association (CAPCOA) for determining the need for additional analysis and mitigation for GHG-related impacts under CEQA. The annual 900 $MTCO_2e$ screening level referenced in the CAPCOA white paper is used as a conservative screening criterion for determining which projects may require further analysis (CAPCOA 2010). The white paper also provides guidance on the

identification of project design features and potential mitigation measures regarding GHG emissions. The CAPCOA white paper reports that the 900 $MTCO_2e$ per year screening level would capture more than 90 percent of development projects, allowing for mitigation towards achieving the State GHG reduction goals. CAPCOA has recommended screening thresholds based on various land use densities and project types. Using CAPCOA guidance, land use projects that meet or fall below the screening thresholds are expected to result in 900 $MTCO_2e$ per year of GHG emissions or less and would not require additional analysis; therefore, the climate change impacts would be considered less than significant. Projects that exceed the 900 $MTCO_2e$ per year screening level must conduct further analysis.

The 2011 GPU PEIR determined that buildout under the 2011 GPU would result in potentially significant impacts related to GHG emissions. The discussion of impacts can be found in Chapter 2.17 Global Climate Change, pages 2.17-12 through 2.17-22 of the GPU PEIR and is hereby incorporated by reference. The 2011 GPU PEIR concluded that 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 2011 GPU goals and policies; and, mitigation measures/implementation programs identified in the 2011 GPU PEIR. The GPU PEIR Mitigation Measure CC-1.2 required the County to prepare a CAP.

Impact Analysis

GHG emissions for this analysis were calculated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.1 (CAPCOA 2016) to estimate annual emissions from short-term construction and the long-term operation of the proposed development. The typical types of GHG emissions resulting from developments such as the potential PSR developments are emissions of CO_2, CH_4, and N_2O. Emission estimates were conducted for each separate PSR Analysis Area for informational purposes but evaluation of impacts is based on future land use development allowed by the Proposed Project under 2050 buildout conditions.

Construction

Construction activities would lead to one-time emissions that would not reoccur over the life of the Proposed Project. Without availability of specific information on when development would occur, this analysis uses a conservative estimate that construction would begin on January 1, 2018 based on the number of dwelling units and/or square footage of commercial uses. The construction emissions modeling included complete buildout of the Proposed Project (residential and commercial land uses) through 2050. CalEEMod defaults were used for construction activity. Construction emissions are calculated in phases like site preparation, grading, building construction, paving, and architectural coating. GHG emissions are from mobile combustion sources both off-road construction equipment such as tractors, loaders, backhoes, excavators, scrapers, and, cranes as well as on-road vehicles like worker and vendor commuting and trucks for soil and material hauling.

Table 2.17-2 shows yearly construction emissions and totals for the Proposed Project and each PSR Analysis Area and former CGSP Area. As shown in this table, PSR Analysis Areas DS8 and SD15 would result in the greatest annual $MTCO_2e$ emissions and FB19+ would result in the least annual $MTCO_2e$ emissions. SD15 shows far greater GHG emissions compared to the other PSR Analysis Areas due to the proposed commercial development within the PSR. When evaluated individually, none of the PSR Analysis Areas or former CGSP Subareas would exceed the CAPCOA screening level threshold of 900 $MTCO_2e$ per year from construction emissions. All PSR future discretionary projects would be required to comply with the CAP Consistency Review Checklist regardless of size~~ if the CAP and Consistency Review Checklist are adopted by the~~

~~Board of Supervisors as a qualified CAP pursuant to CEQA Guidelines Section 15183.5. If the Draft CAP is not adopted the Proposed Project may result in a potentially significant impact because the County would not have a qualified CAP and associated Consistency Review Checklist to reduce impacts to less than significant.~~ Although some PSR properties may fall below the CAPCOA screening-level threshold, based on size and construction and operational characteristics (e.g., vegetation removal, grading quantities, vehicle miles travelled, renewable energy on site, energy efficiencies) this cannot be assured at the program-level of analysis in this EIR. Therefore, the Proposed Project could result in a **potentially significant impact**.

Each project would need to analyze the impacts from GHG emissions (including vegetation removal) during the discretionary review process.

Operational

Operational GHG emissions would continue to occur every year after a project is developed, with the operational year based on the first complete year after construction is completed. The primary source of operational GHG emissions comes from the mobile sources associated with the daily activity of the project (i.e., light-duty trucks and automobiles). Emissions also come from various activities on-site, such as landscape equipment, and on-site combustion sources, such as wood and natural gas fireplaces and hearths. Collectively, these emissions are considered direct emissions because they are being emitted at or near the project site.

Additionally, indirect GHG emissions also result from the production of electricity used to convey, treat, and distribute water and wastewater and the indirect emissions associated with solid waste that is disposed of at a landfill. The CalEEMod model defaults were used for estimation of operational sources except for using residential trip rates provided by the SANDAG Guide of Vehicular Traffic Generation Rates (SANDAG 2002). Unmitigated operational emissions for the PSR Analysis Areas and the former CGSP Area are presented in Table 2.17-3. When evaluated individually, PSR Analysis Areas BO18+, DS8, DS24, NC22, PP30, SD15, VC7+, VC57+, VC67, and the former CGSP Subareas CG1-8 would exceed the screening level threshold of 900 $MTCO_2e$/year from operational activity. All PSR future discretionary projects would be required to comply with the CAP Consistency Review Checklist regardless of size~~ if the CAP and Consistency Review Checklist are adopted by the Board of Supervisors as a qualified CAP pursuant to CEQA Guidelines Section 15183.5. If the Draft CAP is not adopted t~~The Proposed Project absent mitigation for emissions in excess of those anticipated under current land use densities that were captured by the CAP could result in a potentially significant impact.~~ may result in a potentially significant impact because the County would not have a qualified CAP and associated Consistency Review Checklist to reduce impacts to less than significant.~~ Although some PSR properties may fall below the CAPCOA screening-level threshold, based on size and construction and operational characteristics (e.g., vegetation removal, grading quantities, vehicle miles travelled, renewable energy on site, energy efficiencies) this cannot be assured at the program-level of analysis in this EIR. Therefore, the Proposed Project could result in a **potentially significant impact**.

Total Emissions

A summary of the total unmitigated operational and construction emissions from all the PSR Analysis Areas and the former CGSP Area are presented in Table 2.17-3 and Table 2.17-2, respectively. Based on the emissions modeling conducted, project-generated GHG emissions would result in 36,776 $MTCO_2e$/year of unmitigated construction emissions and 42,648 $MTCO_2e$/year of unmitigated operational emissions at project buildout in 2050. The Proposed Project is inconsistent with existing General Plan land use and zoning designations and would

result in a more GHG-intensive project; therefore, the Proposed Project would be inconsistent with the ~~Draft~~ CAP projections. This impact would be **potentially significant.** ~~If the Draft CAP is not adopted by the Board of Supervisors and the Consistency Review Checklist is not available for future Proposed Project discretionary applications, t~~The Proposed Project absent mitigation could result in a **potentially significant** impact ~~because a qualified CAP and the measures applied to individual projects through the Consistency Review Checklist (CEQA Guidelines 15183.5 (b)(1)(D)) would not be approved for use to reduce impacts from the Proposed Project~~. Though some future PSR properties may result in construction and operations emissions that fall below the CAPCOA screening level threshold of 900 $MTCO_2e$/year, the construction and operations characteristics of each future project cannot be measured with certainty at this program-level of analysis. Therefore, this impact could be potentially significant. **(Impact CC-1)**.

Adoption of the Valley Center Community Plan Residential Policy 8 Revision would allow for additional minimum lot size flexibility for residential clustering only within SR-2 or SR-4 areas and only within the sewer service area; however, the adoption would not result in an increase in the number of allowed dwelling units. Because population would not increase, the Valley Center Community Plan Residential Policy 8 Revision would not generate additional GHG emissions, either directly or indirectly.

2.17.3.2 Issue 2: Conflict with Applicable Plan, Policy, or Regulation

Guidelines for Determination of Significance

Based on Appendix G of the CEQA Guidelines, the Proposed Project would have a significant impact if it would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

Impact Analysis

The regulatory plans and policies discussed in Section 2.17.2 of this SEIR and Section 2.17.2 of the 2011 GPU PEIR aim to reduce national, State, and local GHG emissions by primarily targeting the largest emitters of GHG: the transportation and energy sectors. Plan goals and regulatory standards are thus largely focused on the automobile industry and public utilities. For the transportation sector, the reduction strategy is generally three-pronged: to reduce GHG emissions from vehicles by improving engine design; to reduce the carbon content of transportation fuels through research, funding, and incentives to fuel suppliers; and to reduce the miles these vehicles travel through land use changes and infrastructure investments. For the energy sector, the reduction strategies aim to reduce energy demand; impose emission caps on energy providers; establish minimum building energy and green building standards; transition to renewable non-fossil fuels; incentivize homeowners and builders; fully recover landfill gas for energy; and expand research and development.

The Proposed Project would achieve GHG reductions through the California Green Building Standards that includes improved energy efficiency, water conservation, sustainable materials use, and waste reduction. As a condition of building permit approval, future land use development allowed by the Proposed Project would be required to comply with 2016 Title 24 standards. Furthermore, the California Green Building Code requires a 20 percent reduction in indoor water use and 50 percent diversion of construction waste from landfills. The Proposed Project would be required to comply with the ~~Draft~~ CAP and Consistency Review Checklist ~~if/when the CAP is adopted~~. However, development of land uses associated with implementation of the Proposed Project would potentially increase forecasted emissions in the County above the emissions projected in the CAP and may impede attainment of the CAP. Therefore, the Proposed Project

could result in a **potentially significant** impact associated with applicable plans, policies, or regulations adopted for reducing the emissions of GHG (**Impact CC-2).**

Adoption of the Valley Center Community Plan Residential Policy 8 Revision would allow for additional minimum lot size flexibility for residential clustering only within SR-2 or SR-4 areas and only within the sewer service area; however, the adoption would not result in an increase in the number of allowed dwelling units. Therefore, adoption of the Valley Center Community Plan Residential Policy 8 Revision would not result in a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

2.17.4 Cumulative Impacts

2.17.4.1 Issue 1: Generation of Greenhouse Gases

Climate change is a global phenomenon which is cumulative by nature, as it is the result of combined worldwide contributions of GHG to the atmosphere over many years. Therefore, impacts associated with the Proposed Project discussed above also serve as the Proposed Project cumulative impact **(Impact CC-3)**.

2.17.4.2 Issue 2: Conflict with Applicable Plan, Policy, or Regulation

Climate change is a global phenomenon which is cumulative by nature, as it is the result of combined worldwide contributions of GHG to the atmosphere over many years. Therefore, impacts associated with the Proposed Project discussed above also serve as the Proposed Project cumulative impact **(Impact CC-4)**.

2.17.5 Mitigation

2.17.5.1 Issue 1: Generation of Greenhouse Gas Emissions

Adopted General Plan Policies

Implementation of the following General Plan policies and 2011 PEIR mitigation measures and the additional measure as listed below would reduce **Impact CC-1 and CC-3** to a level of less than significant.

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 greenhouse gases and toxic air contaminants.

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 the California Integrated Waste Management Act (AB 939) that requires each local jurisdiction in the state to divert at least 50 percent of its solid waste from being placed into landfills.

Adopted 2011 PEIR 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-1.2: Prepare a ~~County Climate Change Action Plan with an update baseline inventory of greenhouse gas emissions from all sources, more detailed greenhouse gas emissions reduction targets and deadlines; and a comprehensive and enforceable greenhouse gas emissions reduction measures that achieves a 17 percent reduction in emissions from County operations from 2006 by 2020 and a 9 percent reduction in community emissions between 2006 and 2020. Once prepared, implementation of the plan shall be monitored and progress reported on a regular basis.~~Climate Action Plan for the reduction of community-wide (i.e., unincorporated County) and County Operations greenhouse gas emissions consistent with State legislative targets, as described in General Plan Goal COS-20, and consistent with CEQA Guidelines Section 15183.5 or as amended, as referenced in General Plan Policy COS-20.1. As described in Section 15183.5, the key elements of the Climate Action Plan would include:

"CEQA Guidelines Section 15183.5(b)(1):

(1) Plan Elements. A plan for the reduction of greenhouse gas emissions should:

(A) Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;

(B) Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable;

(C) Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area;

(D) Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;

(E) Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels;

(F) Be adopted in a public process following environmental review."

Once prepared, implementation of the Climate Action Plan will be monitored and progress reported on a regular basis, as follows:

O Implementation Monitoring Report – prepared annually;
o Greenhouse Gas Emissions Inventory – updated every two years; and
o Climate Action Plan – updated every five years.

(Reference: 2011 General Plan Update Program EIR Page 2.17-30)

CC-1.3: Work with the San Diego Association of Governments to achieve regional goals in reducing greenhouse gas 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-1.9: Coordinate with the San Diego Air Pollution Control District, San Diego Gas and Electric, 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 greenhouse gas emissions.

CC-1.10: Continue to implement the County Groundwater Ordinance, Watershed Protection Ordinance, Resource Protection Ordinance, Multiple Species Conservation Program and prepare Multiple Species Conservation Plans for North and East County 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 Watershed Protection Ordinance 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, California Department of Forestry and Fire Protection, 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.

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 vehicle miles traveled 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 the San Diego Association of Governments, California Department of Transportation, and tribal governments to maximize opportunities to locate park and ride facilities.
- Continue to coordinate with the San Diego Association of Governments, California Department of Transportation, 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 County of San Diego Planning & 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 greenhouse gas 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.
- 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.

In addition to the 2011 GPU PEIR policies and mitigation measures listed above, the Proposed Project shall be required to implement the following additional mitigation measures. As specified in Mitigation Measure M-GHG-1 of the CAP's ~~Draft~~ SEIR, GPAs that intensify GHG emissions beyond current designations are required to reduce GHG emissions to ensure that CAP emission forecasts are not substantially altered such that attainment of GHG reduction targets could not be achieved. As a program-level analysis, implementation of mitigation measures cannot be quantified because project-specific details are not available; therefore, this discussion provides a programmatic discussion of the potential general impacts of implementing these measures.

The Proposed Project shall comply with relevant CAP GHG reduction measures identified in the CAP Consistency Review Checklist.

Emissions from future discretionary projects resulting from the Proposed Project, if approved, would increase forecasted emissions in the County and may impede attainment of the ~~Draft~~ CAP GHG reduction targets.

In accordance with CEQA Guidelines Section 15126.4(c) and related guidance, the County has determined that future discretionary projects shall provide for all feasible on-site design features/mitigation measures (including the relevant requirements of new development in the CAP Consistency Review Checklist)[1], in addition to off-site GHG mitigation (such as the purchase of carbon offset credits) under the circumstances discussed below, to reduce impacts from GHG emissions from the Proposed Project to a less-than-significant level. As such, Mitigation Measure M-GHG-1 (described below) requires PSR properties that increase density or intensity above the 2011 GPU to offset additional (Option 1) or all (Option 2) GHG emissions for a 30-year period.[2]

[1] The ~~Draft~~ Cap Consistency Review Checklist can be found at: https://www.sandiegocounty.gov/content/dam/sdc/pds/advance/cap/publicreviewdocuments/PostBOSDocs/Final%20CAP%20Checklist_FormFillable.pdf

[2] A "project life" is 30 years. This methodology is consistent with the 30-year project life time frame used by the South Coast Air Quality Management District's GHG guidance (SCAQMD 2008)

CARB recommends that "lead agencies prioritize on-site design features and direct investments in GHG reductions in the vicinity of the project" (CARB 2017). CARB also recognizes that "[w]here further design or regional investments are infeasible or not proved to be effective, it may be appropriate and feasible to mitigate project emissions through purchasing and retiring carbon credits issued by a recognized and reputable accredited carbon registry" (CARB 2017). Examples of off-site mitigation include, among other mechanisms, the purchase of verifiable carbon "offsets" from a reputable carbon registry that will undertake mitigation. The use of carbon offsets to mitigate GHG emissions is expressly authorized by CEQA Guidelines section 15126.4(c)(3).

One carbon offset credit represents the past reduction or sequestration of one metric ton of carbon dioxide equivalent that is "not otherwise required" (CEQA Guidelines section 15126.4(c)(3)). Carbon offsets that reduce the net increase of GHG emissions shall achieve real, permanent, quantifiable, verifiable, and enforceable reductions (Cal. Health & Safety Code section 38562(d)(1)).

The County shall implement the following mitigation measure to reduce significant cumulative GHG impacts and to ensure that the County can achieve its reduction targets as part of the ~~Draft~~ CAP:

M-GHG-1: The County shall require future projects resulting from the Proposed Project that increase their emissions above what is allowed in the 2011 GPU PEIR to reduce their emissions to ensure that CAP emission forecasts are not substantially altered such that attainment of GHG reduction targets could not be achieved. Project applicants could accomplish this through two options, as outlined below:

Option 1 (No Net Increase): PSR project applicants shall achieve no net increase in GHG emissions from additional density or development intensity (e.g., new zoning use categories not previously allowed) above the 2011 GPU/zoning over the life of the project (30 years). Applicants shall be required in their respective CEQA documents to quantify the GHG emissions from their projects that exceed the GHG emissions for the 2011 GPU density or intensity forming the basis of the County of San Diego ~~Draft~~ Climate Action Plan (CAP) emission forecasts (i.e., projections). This increase in emissions shall be reduced through on-site design features and mitigation measures, and by off-site mitigation, including purchase of carbon offset credits by the applicant, if needed. Applicants shall demonstrate compliance with relevant CAP measures as identified in the "CAP Consistency Review Checklist" in addition to all feasible on-site design features and mitigation measures. Off-site mitigation, including purchase of carbon offset credits, would be allowed after all feasible on-site design features and mitigation measures have been incorporated. For example, if 400 residential units were allowed under the 2011 GPU and a PSR applicant proposes 500 residential units, the emissions for the additional 100 units would be calculated and offset through compliance with the CAP Consistency Review Checklist and additional feasible on-site measures and off-site measures, including the use of carbon offsets. The emissions associated with the allowable density of 400 units would be mitigated through compliance with the CAP Consistency Review Checklist (Appendix F).

The County will consider, to the satisfaction of the Director of Planning & Development Services (PDS), the following geographic priorities for GHG reduction features, and GHG reduction projects and programs: 1) project design features/on-site reduction measures; 2) off-site within the unincorporated areas of the County of San Diego; 3) off-site within the County of San Diego; 4) off-site within the State of California; 5) off-site within the United States; and 6) off-site internationally.

If carbon offset credits are provided as mitigation after all feasible measures are provided on site, the applicant, or its designee, shall purchase and retire carbon offsets in a quantity sufficient to offset the net increase from GHG emissions above the density or intensity allowed in the 2011 GPU for the life of the project (i.e., 30 years). This includes all GHG emissions from construction (including sequestration loss from vegetation removal) and operations.

Carbon offset credits must be purchased through any of the following: (i) a CARB-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard, (ii) any registry approved by CARB to act as a registry under the state's cap-and-trade program, (iii) through the CAPCOA GHG Rx and the SDAPCD, or (iv) if no registry is in existence as identified in options (i), (ii), or (iii), above, then any other reputable registry or entity that issues carbon offsets consistent with California Health & Safety Code section 38562(d)(1)), to the satisfaction of the Director of PDS.

If utilizing the purchase of carbon credits to fulfill the requirement to offset GHG emissions associated with the increased development, prior to County's issuance of the project's first grading permit (for construction GHG emissions) or first building permit (for operations GHG emissions) the applicant, or its designee, shall provide evidence to the satisfaction of the Director of PDS that the project applicant or its designee has purchased and retired carbon offsets in a quantity sufficient to offset the net increase of construction and operations GHG emissions generated by the project. Operations emissions may be offset in phases, commensurate with the overall phasing of the project.

Option 2 (Net Zero): PSR project applicants shall reduce all project GHG emissions to net zero to achieve no net increase over baseline conditions (i.e., carbon neutrality). Project emissions shall be reduced to zero through on-site design features and mitigation measures and off-site mitigation, including purchase of carbon offset credits by the applicant or its designee. Applicants shall demonstrate compliance with relevant CAP measures as identified in the "CAP Consistency Review Checklist" before considering additional feasible on-site design features and mitigation measures. Off-site mitigation, including purchase of carbon offset credits, would be allowed after all feasible on-site design features and mitigation measures have been incorporated.

The County will consider, to the satisfaction of the Director of Planning & Development Services (PDS), the following geographic priorities for GHG reduction features, and GHG reduction projects and programs: 1) project design features/on-site reduction measures; 2) off-site within the unincorporated areas of the County of San Diego; 3) off-site within the County of San Diego; 4) off-site within the State of California; 5) off-site within the United States; and 6) off-site internationally.

If carbon offset credits are provided as mitigation after all feasible measures are provided on-site, the applicant, or its designee, shall purchase and retire carbon offsets in a quantity sufficient to offset the net increase from GHG emissions above the density or intensity allowed in the 2011 GPU for the life of the project (i.e., 30 years). This includes all GHG emissions from construction (including sequestration loss from vegetation removal) and operations.

Carbon offset credits must be purchased through any of the following: (i) a CARB-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard, (ii) any registry approved by CARB to act as a

registry under the state's cap-and-trade program, (iii) through the CAPCOA GHG Rx and the SDAPCD, or (iv) if no registry is in existence as identified in options (i), (ii), or (iii), above, then any other reputable registry or entity that issues carbon offsets consistent with California Health & Safety Code section 38562(d)(1)), to the satisfaction of the Director of PDS.

If utilizing the purchase of carbon credits to fulfill the requirement to offset GHG emissions associated with the increased development, prior to County's issuance of the project's first grading permit (for construction GHG emissions) or first building permit (for operations GHG emissions) the applicant, or its designee, shall provide evidence to the satisfaction of the Director of PDS that the project applicant or its designee has purchased and retired carbon offsets in a quantity sufficient to offset the net increase of construction and operations GHG emissions generated by the project. Operations emissions may be offset in phases, commensurate with the overall phasing of the project.

The Proposed Project includes a "D" Special Area Regulation (D-Designator) that will be assigned to each PSR property that is approved for increased density or intensity. If a PSR property applicant proposes a future project that utilizes the increased density or intensity (i.e., uses that were not allowed under the 2011 GPU zoning) approved by the Proposed Project, then the D-Designator would require that Mitigation Measure M-GHG-1 above would be implemented on each future project during discretionary review (see D-Designator as Attachment I to this EIR). Proposed Project Mitigation Measure M-GHG-1 and the enforcement through the D-Designator would ensure that impacts from the Proposed Project would be less than significant. For the reasons stated above in this SEIR, Mitigation Measure M-GHG-1 would reduce GHG emissions as expressly authorized in CEQA Guidelines 15126.4(c)(3).

With implementation of Mitigation Measure M-GHG-1, the incremental increase in GHG emissions from the Proposed Project would be offset such that CAP emission forecasts would not be affected. Implementation of the above mitigation measure and the policies and mitigation measures of the GPU PEIR listed above would reduce Proposed Project impacts associated with GHG emissions to no net increase above what is allowed in the 2011 GPU PEIR (Option 1 above) or carbon neutral (Option 2 above (net zero GHG emissions). This impact would be less than significant.

The Draft CAP and Draft Consistency Review Checklist have not been adopted by the Board of Supervisors at the time of this writing. Development of land uses associated with implementation of the Proposed Project would potentially increase forecasted emissions in the County above the emissions projected in the CAP and may impede attainment of the CAP. ~~If the CAP is not adopted and the SEIR is not certified, some of the Proposed Project properties would comply with the CAPCOA screening threshold; however, some of the Proposed Project properties would result in noncompliance with screening level standards recommended by CAPCOA. If the CAP is not adopted and the SEIR for the CAP is not certified, then the County would not have a qualified CAP (CEQA Guidelines 15183.5) or a Consistency Review Checklist (CEQA Guidelines 15183.5 (b)(1)(D)) to apply to the Proposed Project to reduce GHG impacts to less-than-significant levels.~~ However, the Proposed Project Mitigation Measure M-GHG-1 as enforced through the D-Designator with the requirement to provide all feasible on-site design measures and mitigation prior to mitigating off-site is adequate to ensure GHG emissions would be reduced to less-than-significant levels. Therefore, the Proposed Project would result in a **less than significant impact** from GHG emissions.

2.17.5.2 Issue 2: Conflict with Applicable Plan, Policy, or Regulation

Implementation of the General Plan policies, 2011 PEIR mitigation measures listed above, and mitigation measure M-GHG-1 would achieve no net increase above what is allowed in the 2011 GPU PEIR or carbon neutrality (i.e., net zero GHG emissions); thus, the Proposed Project would be consistent with the CAP and would not conflict with any adopted and applicable local or State plans, policies, or regulations to reduce GHG emissions in 2020, 2030, and/or 2050.

~~The Draft CAP and Consistency Review Checklist have not been adopted by the Board of Supervisors at time of this writing.~~ Development of land uses associated with implementation of the Proposed Project would potentially increase forecasted emissions in the County above the emissions projected in the CAP and may impede attainment of the CAP. ~~If the CAP is not adopted, some of the Proposed Project properties would comply with the CAPCOA screening threshold; however, some of the Proposed Project properties would result in noncompliance with screening level standards recommended by CAPCOA. If the CAP is not adopted and the SEIR is not certified, then the County would not have a qualified CAP (CEQA Guidelines 15183.5) or a Consistency Review Checklist (CEQA Guidelines 15183.5 (b)(1)(D)) to apply to the Proposed Project to reduce GHG impacts to less-than-significant levels.~~ However, the Proposed Project Mitigation Measure M-GHG-1 as enforced through the D-Designator with the requirement to provide all feasible on-site design measures and mitigation prior to mitigating off-site is adequate to ensure GHG emissions would be reduced to less-than-significant levels. Therefore, the Proposed Project would result in a **less than significant impact** and would not conflict with an adopted and applicable local or State plans, policies, or regulations to reduce GHG emissions.

2.17.6 Conclusion

2.17.6.1 Issue 1: Generation of Greenhouse Gas Emissions

Implementation of the Proposed Project would result in potentially significant cumulative impacts associated with the generation of GHG emissions. Implementation of the adopted General Plan policies and 2011 PEIR mitigation measures and Proposed Project mitigation measure M-GHG-1 would reduce impacts to below a level of significance. The Proposed Project Mitigation Measure M-GHG-1 as enforced through the D-Designator with the requirement to provide all feasible on-site design measures and mitigation prior to mitigating off-site is adequate to ensure GHG emissions would be reduced to less-than-significant levels. **Impacts associated with generation of GHG emissions (Impact CC-1 and CC-3) would be less than significant.**

2.17.6.2 Issue 2: Conflict with Applicable Plan, Policy, or Regulation

Implementation of the Proposed Project would result in potentially significant cumulative impacts associated with conflicting with any adopted and applicable local or State plans, policies, or regulations to reduce GHG emissions in 2020, 2030, and/or 2050. The Proposed Project would implement mitigation measure M-GHG-1 that would achieve no net increase above what is allowed in the 2011 GPU PEIR or carbon neutrality; therefore, the Proposed Project would be consistent with the CAP. The Proposed Project Mitigation Measure M-GHG-1 as enforced through the D-Designator with the requirement to provide all feasible on-site design measures and mitigation prior to mitigating off-site is adequate to ensure GHG emissions would be reduced to less-than-significant levels. **Therefore, impacts associated with conflicting with applicable plans, policies, or regulations (Impact CC-2 and CC-4) would be less than significant.**

Table 2.17-1 County of San Diego GHG Emissions by Sector (2014)

Sector	Total Emissions (million $MTCO_2e$)	Percent of Total Emissions
On-Road Transportation	1.5	45%
Electricity	0.8	24%
Solid Waste	0.3	11%
Natural Gas	0.3	9%
Agriculture	0.2	5%
Water	0.1	4%
Off-Road Transportation	<0.1	1%
Wastewater	<0.1	1%
Propane	<0.1	<1%
Total:	**3.2**	**100%**

GHG = greenhouse gas; $MTCO_2e$ = metric tons of carbon dioxide equivalent
Totals may be off due to rounding
Source: County 2017

Table 2.17-2 Construction Unmitigated Greenhouse Gas Emissions Summary

PSR Analysis Area/ Former CGSP Area	Total $MTCO_2e$
BO18+	655
CD14	260
DS8	8,683
DS24	1,598
FB21+	260
FB19+	57
FB17	527
FB2+	362
ME26	369
ME30A	370
NC37	324
NC38+	530
NC3A	324
NC22	547
NC18A	527
PP30	1,524
SD15	11,795
VC51	326
VC7+	3,781
VC57+	2,649
VC67	644
CGSP	664
Proposed Project 2050 Total Emissions	**36,776**

Notes: Totals may not add due to rounding.
/year = per year; CGSP = Champagne Gardens Specific Plan; $MTCO_2e$ = metric tons of carbon dioxide equivalent; PSR = Property Specific Requests
Source: Modeling performed by County of San Diego Staff in 2017 using CalEEMod Version 2016.3.1

Table 2.17-3 Operational Unmitigated Greenhouse Gas Emissions at Plan Buildout (2050)

PSR Analysis Area/Former CGSP Area	Operational $MTCO_2e$/year	30-Year Lifetime Operational $MTCO_2e$
BO18+	934	28,020
CD14	151	4,530
DS8	6,308	189,240
DS24	3,296	98,880
FB21+	114	3,420
FB19+	5	150
FB17	535	16,050
FB2+	345	10,350
ME26	560	16,800
ME30A	625	18,750
NC37	258	7,740
NC38+	616	18,480
NC3A	178	5,340
NC22	843	25,290
NC18A	732	21,960
PP30	2,628	78,840
SD15	8,529	255,870
VC51	211	6,330
VC7+	5,450	163,500
VC57+	4,976	149,280
VC67	3,097	92,910
CGSP	2,256	67,680
Proposed Project 2050 Total Emissions	**42,648**	**1,279,440**

Notes: Totals may not add due to rounding.
/year = per year; CGSP = Champagne Gardens Specific Plan; $MTCO_2e$ = metric tons of carbon dioxide equivalent; PSR = Property Specific Requests
Source: Modeling performed by County of San Diego Staff in 2017 using CalEEMod Version 2016.3.1

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