

5.0 ENVIRONMENTAL IMPACT ANALYSIS

7. GREENHOUSE GAS EMISSIONS

1. INTRODUCTION

This section of the Draft EIR addresses the Entrada South Project's (Project) potential impacts on global climate change. Global climate change refers to changes in average climatic conditions, including changes in temperature, wind patterns, precipitation, and storms. Global warming, which is part of climate change, is the observed increase in average temperature of the Earth's surface and atmosphere. One identified cause of global warming is an increase of greenhouse gases (GHGs) in the atmosphere; these gases allow the sun's rays to enter the Earth's atmosphere but trap the energy that is radiated back into space, resulting in a warming of the atmosphere called the "greenhouse effect." The section analyzes GHG emissions from: (1) existing, on-site conditions (pre-Project); and (2) the Project's construction and operational conditions, as well as vegetation changes. The analysis is based on ENVIRON International Corporation's *Greenhouse Gas Emissions Technical Report* (GHG Report), dated February 2015, included in **Appendix 5.7A** of this Draft EIR.

2. ENVIRONMENTAL SETTING

a. Scientific Background

(1) Science of Global Climate Change

Emissions of carbon dioxide (CO₂) are a leading cause of global warming, with other pollutants such as methane (CH₄), nitrogen dioxide (N₂O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride also contributing. (See Health & Safety Code, Section 38505(g).) The magnitude of each GHG's impact on global warming differs because each GHG has a different global warming potential; i.e., certain compounds have, on a pound-for-pound basis, greater contributions to global warming than others. The effect of each GHG is measured as a combination of the volume of its emissions and its global warming potential, using 1 pound of CO₂ as the common equivalent measure of global warming potential. (CO₂ has the greatest impact on global warming because of the relatively large quantities of CO₂ emitted into the atmosphere.) Thus, GHG emissions are typically measured in terms of megagrams or metric tonnes of CO₂ equivalent (CO₂e).¹

¹ In this analysis, a "tonne" refers to a metric ton, 1,000 kilograms (2,204.6 pounds).

In the context of CEQA, “GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective.”² Further, because climate change is occurring on a global scale, it is not meaningfully possible to quantify the scientific effect of new GHG emissions caused by a single project or whether a project’s net increase in GHG emissions, when coupled with other activities in the region, is cumulatively considerable.³

(2) Potential Effects of Human Activity on Global Climate Change

Globally, climate change has the potential to impact numerous environmental resources through anticipated, though uncertain, impacts related to future air temperatures and precipitation patterns.

Scientific modeling predicts that the continued emission of GHGs at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. A warming of about 0.2 degree Celsius (°C, 0.36°F) per decade is projected, and there are identifiable signs that global warming is taking place, including substantial loss of ice in the Arctic.

The understanding of the role that GHG emissions, particulate matter, and aerosols play on global climate trends is complex and involves varying uncertainties and a balance of different effects. In addition to uncertainties about the extent to which human activity rather than solar or volcanic activity is principally responsible for increased warming, there also is evidence that some human activity has cooling, rather than warming, effects, as discussed in publications by the Intergovernmental Panel on Climate Change (IPCC). Nonetheless, when all effects and uncertainties are considered together, the consensus is that human activity has contributed significantly to global warming.

² CAPCOA, *CEQA & Climate Change*, p. 35, January 2008. See also Sacramento Metropolitan Air Quality Management District, *CEQA Guide*, p. 6-1, November 2014 [the Sacramento Metropolitan Air Quality Management District (SMAQMD) has concluded that “from the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative”]; San Joaquin Valley Air Pollution Control District, *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*, p. 4, December 17, 2009 [the San Joaquin Valley Air Pollution Control District (SJVAPCD) has concluded that the “effects of project specific GHG emissions are cumulative”].

³ SMAQMD, *CEQA Guide*, pp. 6-9 to 6-10, November 2014 [the SMAQMD has “recognize[d] ... that there is no known level of emissions that determines if a single project will substantially impact overall GHG emission levels in the atmosphere”]; SJVAPCD, *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*, p. 3, December 17, 2009 [the SJVAPCD has concluded that “existing science is inadequate to support quantification of impacts that project specific GHG emissions have on global climatic change”].

Acknowledging uncertainties regarding the rate at which anthropogenic (i.e., human caused) GHG emissions may continue to increase,⁴ and the impact of such emissions on climate change, the IPCC devises emission scenarios that utilize various assumptions about the rates of economic development, population growth, and technological advancement over the course of the next century. While the projected effects of global warming on weather and climate are uncertain and likely to vary regionally, the following direct effects are expected by the IPCC:

- It is very likely that the Arctic sea ice cover will continue to shrink and thin, with the Northern Hemisphere spring snow cover and global glacier volume also decreasing;
- It is virtually certain that there will be more frequent hot and fewer cold temperature extremes over most land areas on daily and seasonal timescales, with heat waves occurring at a higher frequency and duration;
- The global ocean will continue to warm during the 21st century, with heat penetrating from the surface to the deep ocean and affecting ocean circulation;
- Further uptake of carbon by the ocean will increase ocean acidification;
- Changes in the global water cycle in response to the warming over the 21st century will not be uniform. The contrast in precipitation between wet and dry regions and between wet and dry seasons will increase, although there may be regional exceptions;
- Most aspects of climate change will persist for many centuries even if GHG emissions cease entirely.

Potential secondary effects from global warming also include a global rise in sea level, impacts to agriculture and water supply, changes in disease vectors, and changes in habitat and biodiversity.

(3) Potential Effects of Global Climate Change on the State of California

According to the California Air Resources Board (CARB), some of the potential California-specific impacts of global warming may include loss in snow pack, sea level rise,

⁴ *These uncertainties are attributable to various factors under human control, such as future population growth and the locations of that growth; the amount, type, and locations of economic development; the amount, type, and locations of technological advancement; adoption of alternative energy sources; legislative and public initiatives to curb emissions; and public awareness and acceptance of methods for reducing emissions.*

more extreme heat days per year, more high ozone days, more large forest fires, and more drought years.

To protect the State's public health and safety, resources, and economy, the California Natural Resources Agency—in coordination with other state agencies—has updated the *2009 California Climate Adaptation Strategy* that is titled, *Safeguarding California: Reducing Climate Risk*. The final *Safeguarding California* plan is dated July 2014 and provides policy guidance for state decision makers relative to climate risks in nine sectors: agriculture; biodiversity and habitat; emergency management; energy; forestry; ocean and coastal ecosystems and resources; public health; transportation; and water. It also identifies policies for reducing GHG emissions and accelerating the transition to a clean-energy economy through reductions in emissions, readiness, and continued research.

Several recent studies have attempted to explore the possible negative consequences that climate change, left unchecked, could have in California. These reports acknowledge that scientists' understanding of the complex global climate system, and the interplay of the various internal and external factors that affect climate change, remains too limited to yield scientifically valid conclusions on a localized scale. And, while substantial work has been done at the international and national level to evaluate climatic impacts, far less information is available on regional and local impacts. In addition, projecting regional impacts of climate change and variability relies on large-scale scenarios of changing climate parameters, using information that is typically at too general a scale to make accurate regional assessments.

b. Regulatory Setting

(1) Federal Regulations

(a) Clean Air Act

In *Massachusetts v. Environmental Protection Agency* (2007) 549 U.S. 497, the U.S. Supreme Court held that the U.S. Environmental Protection Agency (USEPA) has authority under the Clean Air Act to regulate CO₂ emissions if those emissions pose an endangerment to the public health or welfare.

In 2009, the USEPA issued an "endangerment finding" under the Clean Air Act, concluding that GHGs threaten the public health and welfare of current and future generations and that motor vehicles contribute to GHG emissions. These findings provide the basis for adopting national regulations to mandate GHG emission reductions under the Clean Air Act.

To date, the USEPA has exercised its authority to regulate mobile sources that reduce GHG emissions via the control of vehicle manufacturers, as discussed immediately below.

(b) Federal Vehicle Standards

In response to the U.S. Supreme Court ruling discussed above, the Bush Administration issued Executive Order 13432 in 2007 directing the USEPA, the Department of Transportation (DOT), and the Department of Energy (DOE) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency for and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the USEPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, President Obama issued a memorandum directing the DOT, DOE, USEPA and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams/mile of CO₂ in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon (mpg) if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the USEPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines.⁵

(c) Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:

⁵ *The emission reductions attributable to the regulations for medium- and heavy-duty trucks were not included in the Project's emissions inventory due to the difficulty in quantifying the reductions. Excluding these reductions results in a more conservative (i.e., higher) estimate of emissions for the Project.*

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- While superseded by the USEPA and NHTSA actions described above, (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of “green jobs.”

(2) State Regulations

(a) Executive Order S-3-05

In 2005, former Governor Schwarzenegger signed Executive Order S-3-05, which established the following GHG emission reduction goals for California: (1) by 2010, reduce GHG emissions to 2000 levels; (2) by 2020, reduce GHG emissions to 1990 levels; and (3) by 2050, reduce GHG emissions to 80 percent below 1990 levels. However, in adopting the 2006 Global Warming Solutions Act (AB 32), discussed below, the Legislature did not adopt the 2050 horizon-year goal from Executive Order No. S-3-05; and, in the last legislative session, the Legislature rejected legislation to enact the Executive Order’s 2050 goal.⁶

⁶ See *Cleveland National Forest Foundation v. San Diego Association of Governments* (2014) 231 Cal.App.4th 1056, 1096; *Professional Engineers in California Government v. Schwarzenegger* (2010) 50 Cal.4th 989, 1015; and see Office of Planning and Research, *Guide to the California State Executive Branch* (Oct. 2004), p. 8.

(b) Assembly Bill 32

Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, was enacted after considerable study and expert testimony before the Legislature. The heart of AB 32 is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020 (Health & Safety Code, Section 38550). In order to achieve this reduction mandate, AB 32 requires CARB to adopt rules and regulations in an open public process that achieve the maximum technologically feasible and cost-effective GHG reductions.

Of relevance to this analysis, in 2007, CARB approved a statewide limit on the GHG emissions level for year 2020 consistent with the determined 1990 baseline. CARB's adoption of this limit is in accordance with Health & Safety Code Section 38550.

Further, in 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan) in accordance with Health & Safety Code Section 38561. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. (A copy of the Scoping Plan is provided in **Appendix 5.7B** of this Draft EIR.)

In the Scoping Plan, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5 percent from the otherwise projected 2020 emissions level; i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations (referred to as "Business-As-Usual" [BAU] or "No Action Taken" [NAT]).⁷ For example, in further explaining CARB's BAU methodology, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

In the 2011 *Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document* (Final Supplement), CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG reduction regulations. Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7 percent (down from 28.5 percent) from the BAU conditions. When the 2020 emissions level projection also was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009–2016) and the Renewable Portfolio Standard (12 percent to 20 percent), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16 percent (down from 28.5 percent) from

⁷ CARB, *Climate Change Scoping Plan: A Framework for Change*, p. 12, October 2008.

the BAU conditions. (A copy of the Final Supplement is located in **Appendix 5.7C** of this Draft EIR.)

Most recently, in 2014, CARB adopted the *First Update to the Climate Change Scoping Plan: Building on the Framework* (First Update).⁸ The stated purpose of the First Update is to “highlight[...] California’s success to date in reducing its GHG emissions and lay[...] the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050.”⁹ The First Update found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80 percent below 1990 levels by 2050 if the State realizes the expected benefits of existing policy goals.¹⁰ (A copy of the First Update is provided in **Appendix 5.7D** of this Draft EIR.)

In conjunction with the First Update, CARB identified “six key focus areas comprising major components of the State’s economy to evaluate and describe the larger transformative actions that will be needed to meet the State’s more expansive emission reduction needs by 2050.”¹¹ Those six areas are: (1) energy; (2) transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure); (3) agriculture; (4) water; (5) waste management; and (6) natural and working lands. The First Update identifies key recommended actions for each sector that will facilitate achievement of the 2050 reduction target.

Based on CARB’s research efforts, it has a “strong sense of the mix of technologies needed to reduce emissions through 2050.”¹² Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies.

As part of the First Update, CARB recalculated the State’s 1990 emissions level using more recent global warming potentials identified by the IPCC. Using the recalculated 1990 emissions level and the revised 2020 emissions level projection identified in the 2011 Final Supplement, CARB determined that achieving the 1990 emissions level by 2020

⁸ *Health & Safety Code Section 38561(h) requires CARB to update the Scoping Plan every five years.*

⁹ *CARB, First Update, p. 4, May 2014.*

¹⁰ *CARB, First Update, p. 34, May 2014.*

¹¹ *CARB, First Update, p. 6, May 2014.*

¹² *CARB, First Update, p. 32, May 2014.*

would require a reduction in GHG emissions of approximately 15 percent (instead of 28.5 percent or 16 percent) from the BAU conditions.

The First Update included a strong recommendation from CARB for setting a mid-term statewide GHG emissions reduction target. CARB specifically recommended that the mid-term target be consistent with: (i) the United States' pledge to reduce emissions 42 percent below 2005 levels (which translates to a 35-percent reduction from 1990 levels in California); and (ii) the long-term policy goal of reducing emissions to 80 percent below 1990 levels by 2050. However, to date, there is no legislative authorization for a post-2020 GHG reduction target, and CARB has not established such a target.

The First Update discusses new residential and commercial building energy efficiency improvements, specifically identifying progress towards zero net energy buildings as an element of meeting mid-term and long-term GHG reduction goals. The First Update expresses CARB's commitment to working with the California Public Utilities Commission and California Energy Commission to facilitate further achievements in building energy efficiency.

The original 2008 Scoping Plan and the 2014 First Update represent important milestones in California's efforts to reduce GHG emissions statewide. The law also requires the Scoping Plan to be updated every five years. The Scoping Plan process, as stated, is thorough and encourages public input and participation.

For example, the original Scoping Plan (2008) was introduced through four workshops held between November 30, 2007, and April 17, 2008. A draft Scoping Plan was released for public review and comment in June 2008, followed by more workshops in July and August 2008. The proposed Scoping Plan was released in October 2008 and considered at the Board hearing on December 12, 2008. In August 2011, after litigation, the initial Scoping Plan was re-approved by the Board and was supported by the Final Supplement to the Scoping Plan Functional Equivalent Document.

In June 2013, CARB held a kick-off public workshop in Sacramento to discuss the development of the First Update to the 2008 Scoping Plan, the public process, and the overall schedule. In July 2013, subsequent regional workshops were held, which provided forums to discuss region-specific issues, concerns, and priorities. In addition, CARB accepted and considered informal stakeholder comments and reconvened the Environmental Justice Advisory Committee to advise and provide recommendations on the development of the First Update. On October 1, 2013, CARB released a discussion draft of the update for public review and comment.

On October 15, 2013, CARB held a public workshop on the First Update and provided an update to the Board at the October 24, 2013, Board hearing. In addition, over 115 comment letters were submitted on the discussion draft. On February 10, 2014, CARB released the draft proposed First Update. On February 20, 2014, CARB held a Board meeting discussion that included opportunities for stakeholder feedback and public comment. On March 14, 2014, CARB released the Appendix F Environmental Analysis, including the 45-day public comment notice, the Appendix B Status of Scoping Plan Measures, and the Appendix C Focus Group Working Papers. On May 15, 2014, CARB released the First Update, with staff's written responses to comments received on the draft and final environmental assessments. On May 22, 2014, the Board approved the First Update, along with the finalized environmental documents.

(c) Energy-Related Sources

California's Renewable Portfolio Standard requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020.¹³ The 33 percent standard is consistent with the Renewable Portfolio Standard goal established in the Scoping Plan. As interim measures, this standard requires 20 percent of retail sales to be sourced from renewable energy by 2013 and 25 percent by 2016.

(d) Mobile Sources

(i) Pavley Regulations

AB 1493 (the Pavley Standard) required CARB to adopt regulations to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks for model years 2009–2016. CARB obtained a waiver from the USEPA that allows for implementation of these regulations notwithstanding possible federal preemption concerns.

CARB's regulations for passenger vehicles (cars and light trucks) combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. This new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California. These standards would apply to all passenger and light duty trucks used by customers, employees of and deliveries to the Project site.

¹³ *Initially, the Renewable Portfolio Standard provisions applied only to investor-owned utilities, community choice aggregators, and electric service providers. SBX1-2 added, for the first time, publicly owned utilities to the entities subject to the standard.*

(ii) Low Carbon Fuel Standard Regulations

Executive Order S-1-07 requires a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California regulated by CARB by 2020.¹⁴ In 2009, CARB approved the Low Carbon Fuel Standard (LCFS) regulations, which became fully effective in April 2010. In 2013, an ethanol company obtained a court order compelling CARB to remedy substantive and procedural defects under CEQA of the LCFS adoption process.¹⁵ However, the court allowed implementation of the LCFS to continue pending correction of the identified defects. Consequently, this analysis assumes that the LCFS will remain in effect during construction and operation of the Project.

(iii) Advanced Clean Cars Regulations

In 2012, CARB approved the Advanced Clean Cars (ACC) program, a new emissions-control program for model years 2017–2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

(iv) Sustainable Communities Strategy

The Sustainable Communities and Climate Protection Act of 2008 (SB 375) coordinates land use planning, regional transportation plans, and funding priorities to reduce GHG emissions from passenger vehicles through better-integrated regional transportation, land use, and housing planning that provides easier access to jobs, services, public transit, and active transportation options.¹⁶ SB 375 specifically requires the Metropolitan Planning Organization (MPO) relevant to the Project area (here, the Southern California Association of Governments [SCAG]) to include a Sustainable Communities Strategy in its Regional Transportation Plan (RTP) that will achieve GHG emission reduction targets set by CARB by reducing vehicle miles traveled from light-duty vehicles through the development of more compact, complete, and efficient communities.

For the area under SCAG's jurisdiction, including the Project Site, CARB adopted regional targets for reduction of mobile source-related GHG emissions by 8 percent for 2020 and by 13 percent for 2035.

¹⁴ *Carbon intensity is a measure of the GHG emissions associated with the various production, distribution and use steps in the "lifecycle" of a transportation fuel.*

¹⁵ *POET, LLC v. CARB (2013) 217 Cal.App.4th 1214.*

¹⁶ *CARB, First Update, pp. 49-50, May 2014.*

(e) Building Standards

Title 24 of the California Code of Regulations regulates the design of building shells and building components. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

The CEC has adopted the 2013 Building Energy Efficiency Standards (2013 Building Standards) contained in Title 24. The 2013 Building Standards (effective July 1, 2014) are 25 percent more efficient than previous standards for residential construction and 30 percent more efficient for nonresidential construction, and will require better windows, insulation, lighting, ventilation systems and other features that further reduce energy consumption in homes and businesses.¹⁷

The CEC also has adopted the 2012 Appliance Efficiency Regulations (2012 Appliance Standards), which are contained in Title 20 of the California Code of Regulations and include standards for both federally-regulated appliances and non-federally regulated appliances.

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen, and establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality.

(f) Solid Waste Diversion

The California Integrated Waste Management Act of 1989, as modified by AB 341, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities; (2) diversion of 50 percent of all solid waste on and after January 1, 2000; and (3) diversion of 75 percent of all solid waste on or after 2020, and annually thereafter. The California Department of Resources Recycling and Recovery (CalRecycle) is required to develop strategies, including source reduction, recycling, and composting activities, to achieve the 2020 goal.

¹⁷ *The CEC recently opened the public process and rulemaking proceedings for adoption of the 2016 Building Energy Efficiency Standards, which the CEC anticipates will be proposed for adoption in 2015 and have an effective date of January 1, 2017.*

CalRecycle published a discussion document, entitled *California's New Goal: 75 Percent Recycling*, which identified concepts that would assist the State in reaching the 75 percent goal by 2020. Subsequently, in October 2013, CalRecycle released a revised concept list, entitled *Update on AB 341 Legislative Report: Statewide Strategies to Achieve the 75 Percent Goal by 2020*.

(g) Carbon Markets

As contemplated by the goals of the Scoping Plan, CARB created a cap-and-trade program that is enforceable and meets the requirements of AB 32. The program is market based, and designed to reduce GHGs from multiple, specified sources, including electric utilities, large industrial facilities, and distributors of transportation, natural gas and other fuels. The program commenced in January 2012, with an enforceable compliance obligation beginning with 2013 GHG emissions.¹⁸ The program also established a firm “cap” on the quantity of GHGs allowed; the cap will decline approximately 3 percent each year beginning in 2013.

CARB allows the use of compliance offsets in the cap-and-trade program. An offset represents a reduction or removal of GHGs from the market and must be measured, quantified, and verified.

Separate and apart from CARB's carbon market, the California Air Pollution Control Officers Association (CAPCOA) introduced the Greenhouse Gas Reduction Exchange (GHG Exchange). The GHG Exchange is intended to provide a trusted source of GHG credits that may be used to mitigate GHG emissions in a similar manner to the cap-and-trade program. Any credits must be measured, quantified and verified.

(3) Regional Regulations

(a) SCAG's Regional Transportation Plan/Sustainable Communities Strategy

As previously discussed, SB 375 requires SCAG to incorporate a Sustainable Communities Strategy into its RTP that achieves the GHG emission reduction targets set by CARB. SCAG's first-ever Sustainable Communities Strategy is included in the *2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*, which was adopted by SCAG in April 2012. As required by SB 375, CARB adopted year 2020

¹⁸ As part of the program, CARB holds quarterly allowance auctions and reserve sales to allow market participants to acquire allowances directly from CARB. The first auction was held in November 2012, and seven subsequent auctions have occurred.

and 2035 GHG reduction targets for each metropolitan region. The SB 375 targets for the Southern California region under SCAG's jurisdiction in 2020 and 2035 are reductions in per capita GHG emissions of 8 percent and 13 percent, respectively.¹⁹

The goals and policies of the Sustainable Communities Strategy that reduce vehicle miles traveled (and result in corresponding GHG emission reductions) focus on transportation and land use planning that include building infill projects, locating residents closer to where they work and play, and designing communities so there is access to high quality transit service. SCAG's Sustainable Communities Strategy is expected to reduce per capita transportation emissions by 9 percent in 2020 and by 16 percent in 2035. In 2012, CARB accepted SCAG's determination that the Sustainable Communities Strategy would meet the region's GHG reduction targets.

Pursuant to Government Code Section 65080(b)(2)(K), SCAG's Sustainable Communities Strategy does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing Sustainable Communities Strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.²⁰

(b) South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is principally responsible for comprehensive air pollution control in the South Coast Air Basin, which includes Los Angeles, Orange, and the urbanized portions of Riverside and San Bernardino counties. SCAQMD works directly with SCAG, County transportation commissions, and local governments and cooperates actively with all federal and state government agencies to regulate air quality.

(i) Adopted, Interim Stationary Source Threshold for Industrial/ Stationary Source Projects

In 2008, SCAQMD's Governing Board adopted an interim CEQA GHG significance threshold of 10,000 MTCO₂e per year for industrial stationary source projects for which SCAQMD is the CEQA lead agency.

¹⁹ CARB, *Approved SB 375 Regional GHG Emission Reduction Targets*, www.arb.ca.gov/cc/sb375/final_targets.pdf, accessed March 11, 2015.

²⁰ CARB, *First Update to the Climate Change Scoping Plan*, p. ES-4, May 2014; Government Code Section 65080(b).

(ii) Draft Threshold for All Other Project Types

For all other projects, SCAQMD staff developed a draft, multi-tier framework to assist with the CEQA significance evaluation. According to the presentation given at the September 28, 2010 working group meeting, SCAQMD staff reviewed the following proposed draft tiered significance threshold approach:

- **Tier 1:** Determine if any CEQA exemption(s) is (are) applicable. If not, move to Tier 2.
- **Tier 2:** Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan (often called a Climate Action Plan) that has gone through public hearings and CEQA review, which has an approved inventory that includes monitoring, etc. If not, move to Tier 3.
- **Tier 3:** For all land use types, determine if the project emits less than 3,000 metric tonnes/year of CO₂e (MTCO₂e/yr).²¹ If not, move to Tier 4.
- **Tier 4:** The proposed performance standards include three options:
 1. Percent Emission Reduction Target

This target is typically defined as a-percent reduction target that is based on consistency with AB 32, as it is based on the same numeric reductions calculated in the Scoping Plan to reach 1990 levels by 2020.
 2. Early Implementation of Applicable AB 32 Scoping Plan Measures
 3. SCAQMD Efficiency Target
 - 2020: 4.8 metric tons per year (MT/year) of CO₂e per service population.
 - 2035: 3.0 MT/year CO₂e per service population; and, incorporate SB 375 regional targets.
- **Tier 5:** Off-site mitigation for life of project (30 years); if this threshold is used, GHG emissions must be mitigated to less than the Tier 3 screening significance threshold.

Based on the above draft staff proposal, if the proposed project cannot meet any of the Tiers, it is presumed to result in a significant impact for purposes of GHG emissions.

²¹ More specific screening thresholds were also provided, which include 1,400 MTCO₂e/yr for commercial projects and 3,500 MTCO₂e/yr for residential and mixed-use projects.

As of February 2015, SCAQMD's Governing Board has not adopted the above draft staff proposal. Therefore, no GHG significance thresholds are approved for use in the South Coast Air Basin by the applicable regional air district (i.e., SCAQMD).

(4) County Regulations

(a) County of Los Angeles General Plan

As discussed in more detail in **Section 5.11**, Land Use and Planning, of this Draft EIR, the County of Los Angeles (County) General Plan (General Plan) directs future growth and development in the County's unincorporated areas and establishes goals, policies, and objectives that pertain to the entire County. The current General Plan, adopted in 1980, does not include a specific element addressing GHG emissions; however, goals and policies designed to reduce GHG emissions are provided and call for reductions in air emissions, reduced commuting distances, improved public transit and other alternative transportation methods, energy conservation, and the use of alternative energy sources.

As discussed further in **Section 5.11**, Land Use and Planning, of this EIR, the County circulated a draft General Plan update, entitled Los Angeles County General Plan 2035 (Draft General Plan), in January 2014. This Draft General Plan contains a new Air Resources Element that addresses air quality and GHG emissions. Relevant goals encourage mixed-use development, the use of "green building" principles, energy and water efficiency, reducing vehicle miles traveled and vehicle trips, and promoting alternative modes of transportation.

The General Plan policy consistency analysis provided in **Section 5.11**, Land Use and Planning, of this EIR indicates the Project would be consistent with relevant General Plan policies related to climate change and GHG emissions.

(b) Santa Clarita Valley Area Plan: One Valley One Vision 2012

As discussed in greater detail in **Section 5.11**, Land Use and Planning, of this Draft EIR, the recently updated Santa Clarita Valley Area Plan: One Valley One Vision 2012 (Area Plan), serves as a long-term guide for development in the Santa Clarita Valley (Valley) Planning Area over the next 20 years. The Area Plan ensures consistency between the General Plans of the County and the City of Santa Clarita (City) in order to achieve common goals. The Area Plan includes several policies related to GHG emissions within its Circulation and Conservation and Open Space Elements. These policies address the use of sustainable concepts to reduce vehicle miles traveled, trip reduction measures such as carpools and flexible work schedules/telecommuting, alternative travel modes including alternative fuel vehicles, the use of energy-efficient and recycled products, energy-conserving heating and cooling systems, LEED™ certification, and recycling.

The Area Plan also summarizes programs and actions that address climate change in the Valley, including encouraging urban infill development; adopting a mixed-use designation in the City near transit centers; increasing standards of density and floor area ratio in urban areas, including non-residential “activity areas” within urban residential areas; improving pedestrian network and bikeway systems; increasing bus service; and balancing job growth with housing growth. The primary GHG-related policy of the Area Plan requires the County to create and adopt a Climate Action Plan; that effort is underway and discussed below.

The Area Plan policy consistency analysis provided in **Section 5.11**, Land Use and Planning, of this EIR, indicates the Project would be consistent with applicable Area Plan polices related to GHGs and climate change.

(c) Draft Community Climate Action Plan

Los Angeles County is in the process of developing a Community Climate Action Plan (Action Plan) to reduce GHG emissions associated with community (not municipal) activities in unincorporated Los Angeles County. The Action Plan will address emissions from building energy land use and transportation, water consumption and waste generation, and set forth the County’s path to a sustainable future that achieves identified GHG reductions. Ultimately, the Action Plan and associated GHG reduction measures will be incorporated into the Los Angeles County General Plan 2035 update.

The Final Draft Action Plan was published for public review in June 2014. Because the Action Plan is a draft document, and because it has not yet been adopted by the County, this discussion is provided for information purposes only.

(d) Green Building Standards

Three ordinances were adopted by the County in furtherance of its Green Building Program in October 2008 and became effective in January 2009. One of those ordinances, known as the Green Building Standards ordinance, applied to four categories of development, with corresponding requirements for each: (1) small residential and nonresidential projects; (2) medium-sized residential projects; (3) medium-sized (i.e., 10,000 to 25,000 square feet) nonresidential, commercial, mixed-use, or first-time tenant improvement projects; and (4) large nonresidential, commercial, mixed-use, or first-time tenant improvement projects greater than 25,000 square feet, and all new high-rise buildings greater than 75 feet in height.

In 2013, in response to mandates set forth in the CALGreen Code, the County adopted the Los Angeles County Green Building Standards Code (Title 31), which adopts

and incorporates by reference specified provisions of the 2013 CALGreen Code.²² The purpose of Title 31 is to facilitate sustainability via planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental air quality. Title 31 also references County Code Chapter 12.84, which provides low impact development (LID) requirements that address water conservation. Title 31 is currently being revised to provide clarity for the development community, ensure consistency with the State and other local agencies, and advance sustainable construction standards in the County.

(5) Previously Adopted Plans and Mitigation

(a) Newhall Ranch RMDP/SCP and EIS/EIR

The Project Site is included in the project area of the Project Applicant's Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (RMDP/SCP), shown in **Figure 3-5**, RMDP/SCP Project Area, in **Section 3.0**, Project Description, of this Draft EIR, which covers certain aspects of resource management for the Project and other nearby developments. As discussed in greater detail in **Section 4.1**, Environmental and Regulatory Setting, the RMDP component is a conservation, mitigation, and permitting plan for the long-term management of sensitive biological resources and development-related infrastructure in the River and tributary drainages within the 11,999-acre Specific Plan area and along the extension of Magic Mountain Parkway through the Project Site. The SCP component is a conservation and management plan to permanently protect and manage a system of preserves designed to maximize the long-term persistence of the San Fernando Valley spineflower (*Chorizanthe parryi ssp. Fernandina*) (spineflower), a federal candidate and state-listed endangered plant species. The SCP encompasses the Specific Plan area, the Valencia Commerce Center planning area, and the Project Site, in order to conduct conservation planning and preserve design on the Project Applicant's land holdings in Los Angeles County that contain known spineflower populations.

The Newhall Ranch RMDP/SCP project was the subject of a joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR) (SCH No. 2000011025) by the U.S. Army Corps of Engineers (Corps) and the California Department of Fish and Wildlife (CDFW).^{23,24} At the time CDFW certified the EIR portion of the EIS/EIR in December 2010,

²² *The County's 2008 ordinances are being repealed, and the more recently adopted Title 31 requirements will apply to this Project.*

²³ *Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan, Final Joint Environmental Impact Statement and Environmental Impact Report, June 2010.*

it also adopted the Mitigation Monitoring and Reporting Plan (MMRP) for the RMDP/SCP project. This regulatory plan, required under CEQA, describes the mitigation measures, monitoring, and/or reporting plan for the Newhall Ranch RMDP/SCP project (including the Entrada South Project Site). CDFW specifically adopted mitigation measures requiring implementation of the Project Applicant's design commitments to ensure that impacts relating to GHG emissions from implementation of the Newhall Ranch RMDP/SCP project would be less than significant (see Mitigation Measures (MMs) RMDP/SCP GCC-1 through GCC-7 in **Appendix 2A**).

c. Existing Conditions

(1) Project Site

The Project Site is generally comprised of vacant land, some agricultural uses, a small plant nursery used by the adjacent Six Flags Magic Mountain, and abandoned oil wells and associated access roads. The agricultural area is approximately 7.45 acres in size and used as pasture. (Refer to **Section 5.2**, Agricultural and Forest Resources, of the Draft EIR for further discussion of impacts to agricultural land.) All existing GHG emission sources would be eliminated with implementation of the Project.

As shown in **Table 5.7-1**, Summary of GHG Emissions from Baseline/Existing Conditions, below, the existing GHG emissions associated with the existing site's agricultural uses are estimated to be approximately 13.2 MT CO₂e per year. All other existing uses are estimated to produce negligible GHG emissions.

Table 5.7-1
Summary of GHG Emissions from Baseline/Existing Conditions

Category	CO ₂ e Emissions (MT/year)
Energy Use Associated with Water Use	11.2
N ₂ O Emissions Associated with Fertilizer Use	1.4
Diesel Fuel Usage	0.5
Total	13.2
<i>Numbers may not sum exactly due to rounding.</i>	
<i>Source: Table ES-1 and Appendix A in the GHG Report provided in Appendix 5.7A.</i>	

²⁴ The California Department of Fish and Game was officially renamed the California Department of Fish and Wildlife as of January 1, 2013.

(2) Surrounding Area

Because the effects of GHG emissions on global climate change extend well beyond the Project vicinity, the following discussion provides context regarding national and statewide GHG emission levels.

In 2012, the United States emitted about 6.5 billion metric tonnes (emissions not including sinks) of CO₂e or about 20.5 metric tonnes per person per year. This represents a 10-percent reduction below 2005 total emission levels. Of the four major sectors nationwide—residential, commercial, industrial, and transportation—transportation accounts for the highest fraction of GHG emissions (approximately 34 percent); these emissions are entirely generated from direct fossil fuel combustion.

Over 60 percent of the United States' transportation emissions resulted from passenger car and light-duty truck use. According to the Inventory of U.S. Greenhouse Gas Emissions and Sinks, from 2005 to 2012, transportation emissions dropped by 9 percent due, in part, to increased fuel efficiency across the U.S. vehicle fleet; higher fuel prices; and an associated decrease in the demand for passenger transportation. However, from 1990 to 2012 as a whole, transportation emissions rose by 16 percent, principally because of increased demand for travel with limited gains in fuel efficiency.

In 2012, California emitted approximately 459 million tonnes of CO₂e, or about 7 percent of the nation's emissions. California's relative contribution to the nationwide emissions level is due primarily to the sheer size of California, as compared to other states. For example, in 2010 (the most recent year with compiled data), California had the fifth lowest per capita GHG emission rates in the country, due to the success of its energy-efficiency and renewable energy programs and to commitments that have lowered the State's rate of emissions growth. Another factor that has reduced California's fuel use and GHG emissions is its mild climate, as compared to that of many other states.

The CEC found that transportation is the source of approximately 41 percent of the State's GHG emissions, followed by electricity generation (both in-state and out-of-state) at 23 percent, and industrial sources at 20 percent. Agriculture and forestry is the source of approximately 8.3 percent of the State's GHG emissions. The source category "other," is comprised of approximately 8.3 percent of the State's GHG inventory and includes residential and commercial activities.

3. ENVIRONMENTAL IMPACTS

a. Methodology

(1) Sources

The Project's GHG emissions inventory data presented in this section includes the following sources of emissions: (1) area sources (e.g., landscaping-related fuel combustion sources and natural gas fireplaces); (2) energy use associated with residential and non-residential buildings; (3) water supply and wastewater (i.e., the indirect GHG emissions from the production of electricity required to convey, treat, and distribute water and wastewater); (4) solid waste (i.e., the indirect GHG emissions associated with waste disposed of at a landfill using disposal rates by land use and overall composition); (5) mobile sources (e.g., passenger vehicles); (6) construction; and (7) vegetation changes. The Project's annual operational emissions consist of the first five categories, while the one-time emissions are associated with construction and vegetation changes.

(2) Model

ENVIRON primarily utilized the California Emission Estimator Model version 2013.2.2 (CalEEMod) to quantify the Project's GHG emissions. CalEEMod is a statewide program designed to calculate GHG emissions from development projects in California, and was developed under the auspices of SCAQMD upon receiving input from other California air districts.

CalEEMod utilizes widely accepted models for emissions estimates combined with appropriate default data that can be used if site-specific information is not available. For example, CalEEMod incorporates USEPA-developed emission factors; CARB's on-road and off-road equipment emission models, such as EMFAC and OFFROAD;²⁵ and studies commissioned by other California agencies, such as the CEC and CalRecycle.

As for the CalEEMod default values and existing regulation methodologies, the program is designed to be customized for use in each specific local air district region. The analysis presented here, therefore, used default factors for Los Angeles County, unless otherwise noted in the GHG Report. Third-party studies were also relied upon to support analyses and assumptions made outside of CalEEMod.

²⁵ *EMFAC is an emissions factor model used to calculate emissions rates from on-road vehicles (e.g., passenger vehicles; haul trucks). OFFROAD is an emissions factor model used to calculate emission rates from off-road mobile sources (e.g., construction equipment).*

A detailed overview of the methodological assumptions and protocols used in the modeling to generate the emissions inventory data presented in this section is contained in Section 3 (GHG Emissions Inventory) of the GHG Report, as annotated below:

- Construction: Section 3.2.1; Tables 2–7
- Vegetation Changes: Section 3.2.2; Tables 8–9
- Area Sources: Section 3.3.1; Tables 10–11
- Energy Use: Section 3.3.2; Tables 12–16
- Water Supply, Treatment, and Distribution: Section 3.3.3; Tables 17–18
- Solid Waste: Section 3.3.4; Tables 19–20
- Mobile Sources: Section 3.3.5; Tables 21–27

Additionally, Appendix B of the GHG Report contains the CalEEMod Output Files.

(3) Incorporation of Project Design Features and Regulatory Standards

Seven Project Design Features (PDFs) and other Project attributes, described below, were incorporated quantitatively into the Project's GHG emissions inventory. Additionally, analysis of the Project's GHG emissions quantitatively incorporated the following regulatory compliance measures:

- The 33% Renewable Portfolio Standard;
- The Pavley, LCFS, and ACC regulations;
- The Statewide 2013 Building Efficiency Standards, formally known as CCR Title 24, Part 6. *(The Project shall currently meet the 2013 Title 24 standards. However, the Title 24 standards are revisited by the CEC on a three-year cycle and are becoming increasingly efficient, particularly in light of the expressed desire of the CEC and CARB to achieve zero net energy by 2020 for residential buildings and by 2030 for commercial buildings. Should an updated version of the Title 24 standards be adopted prior to the filing of building permit applications, the standards in effect at that time shall apply.);*
- The statewide goal of 75 percent solid waste diversion; and
- The statewide goal of 20-percent reduction for indoor water consumption.

Several regulatory efforts were not incorporated quantitatively into the Project's GHG emissions inventory due to the difficulty in modeling and quantifying the resulting GHG emission reductions. The unquantifiable regulatory efforts include:

- The heavy-duty engines and vehicles fuel efficiency standards adopted by the USEPA and NHTSA for model years 2014–2018;²⁶
- EISA, which promotes the supply of renewable fuel, the production of light bulbs with higher efficiency, creation of “green jobs,” etc.; and
- The 2012 Appliance Standards.

Incorporating these regulations into the Project's GHG emissions estimate would further reduce the Project emissions total; therefore, omitting them yields a more conservative analysis. Additional discussion of the specific methodologies used to address the defined significance thresholds is provided in Subsection 3.c, Significance Thresholds, below.

b. Proposed Design Elements/Project Design Features

The Project would create a sustainable, mixed-use community comprised of mutually supportive land uses that offer housing, employment, shopping, recreation, and other community-serving activities of a quality consistent with the high design standards of the existing Valencia community. Specifically, the Project includes 339 single-family units, 1,235 multi-family units, and 730,000 square feet of commercial uses anticipated to be comprised of approximately 435,000 square feet of office uses and about 295,000 square feet of commercial retail uses. In addition, the Project includes a 9.4-acre elementary school, a 5.6-acre public neighborhood park, 101.7 acres of open space, two private recreational centers within 2.9 acres, and a 27.2-acre preserve for spineflower.²⁷ Facilities and infrastructure proposed as part of the Project consist of a network of roads and trails, drainage and water quality improvements, dry utilities systems, a potable water system, a recycled water system, and a sanitary sewer system.

²⁶ Based on preliminary estimates, incorporation of these standards would reduce the emissions from the affected vehicles by 6 percent to 23 percent over 2010 baseline data.

²⁷ Open space acreage refers to lots within the tract map designated as open space. Additional open space areas, such as natural drainage courses, roadway medians, and landscaped parkways adjacent to on-site roadways, in addition to the proposed park, recreation centers, and Spineflower Preserve, bring the total open space area to approximately 153 acres.

The Project is designed to accommodate regional growth projected by SCAG for the Santa Clarita Valley Planning Area and northern Los Angeles County within a site adjacent to existing, approved, or planned infrastructure, urban services, transportation corridors, transit facilities, and major employment centers in furtherance of SB 375 policies. Related to this effort, the Project design utilizes sustainability principles, including an appropriate mix of land uses, job generation, design principles to reduce vehicle miles traveled and commuting distances, access to transit, the provision of open space and recreational amenities, trail connectivity, preservation of natural areas, water and energy conservation, efficient interior climate control, and the incorporation of green building techniques.

Further, based on a review of the Project's attributes, it was determined that the Project incorporates several transportation-related GHG reduction strategies provided in CAPCOA's 2010 guidance, titled *Quantifying Greenhouse Gas Mitigation Measures*. (See also Table 1 in Appendix D of the GHG Report.) A summary of the applicable CAPCOA strategies is provided below:

- **Transit System Improvements, Expand Transit Network (TST-3):** As discussed in **Section 3.0**, Project Description, of this Draft EIR, Santa Clarita Transit service would be expanded to service the Project Site. Specifically, existing routes would be expanded or new routes added to provide transit access from the Project Site to the Valencia Commerce Center area, Valencia Industrial Center area and Newhall Metrolink Station, resulting in a net increase in transit service of approximately 21.8 miles. Expanding the existing transit network would result in a 1.7-percent reduction in total Project-related vehicle miles traveled.
- **Neighborhood/Site Design, Provide Pedestrian Network Improvements (SDT-1):** As shown in **Figure 3-14**, Project Trails Plan, in **Section 3.0**, Project Description, of this Draft EIR, the Project includes an extensive community trail system throughout the Project Site, which would be linked to the Newhall Ranch Specific Plan trail system to the west and the existing community of Westridge to the south. As illustrated, the proposed trail system would include community trails, bike lanes, paseos, and recreational trails. Overall, the Project would include approximately 33,150 linear feet of trails and paseos with direct connections between the proposed residential uses, commercial uses, the elementary school site, recreational centers, and park uses. In addition, approximately 8,090 linear feet of Class II bike lanes would be provided. The pedestrian network improvements would result in a 2.0-percent reduction in total Project-related vehicle miles traveled.
- **Neighborhood/Site Design, Traffic Calming Measures (SDT-2):** As discussed above, the Project includes community trails, bike lanes, paseos, and recreational trails that would not only provide the actual infrastructure to facilitate non-vehicular travel (SDT-1), but would also provide a more attractive walking

environment through the reduction and slowing of roadway traffic volumes (e.g., marked crosswalks, count-down signal timers, curb extensions, median islands, on-street parking, planter strips with street trees, and chokers). For example:

- The community trails would be paved pedestrian/bicycle routes in landscaped parkways and located adjacent to major roads in order to connect the existing and proposed communities in the area;
- Paseos would be paved pedestrian/bicycle routes and would provide pedestrian access between residential neighborhoods and the neighborhood park, the private recreation centers, the elementary school, the community and local trails, and the larger commercial area; and,
- Recreational trails would provide pedestrian/bicycle access and may or may not be paved.

The approximate combined length of these trails is 13,740 linear feet. The traffic calming measures would result in a 0.75-percent reduction in total Project-related vehicle miles traveled.

- **Trip Reduction Programs, Implement Commute Trip Reduction Program-Voluntary (TRT-1):** The Project would implement a voluntary commute trip reduction program that would discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, transit, walking, and biking. Please see PDF ES 5.7-4 below for specific details regarding the program. Implementation of this PDF would result in a 1.0-percent reduction in total VMT/5.4-percent reduction in commuter VMT.
- **Trip Reduction Programs, Provide Ride-Sharing Programs (TRT-3):** The Project would include a ride-sharing program to facilitate more efficient commute practices amongst the employees of on-site businesses. Please see below, PDF ES 5.7-5, for specific details regarding the program. Implementation of this PDF would result in a 1.8-percent reduction in total VMT/10-percent reduction in commuter VMT.
- **Trip Reduction Programs, Telecommuting and Alternative Work Schedules (TRT-6):** Encouraging telecommuting and alternative work schedules reduces the number of commute trips and, therefore, vehicle miles traveled by employees. The Project analysis conservatively assumed a 10-percent telecommuting participation 1.5 days per week for the Project.

This participation rate is supported based on the following data: The 2012 American Community Survey found that 2.6 percent of the workforce primarily telecommutes. Additional data compiled by the same Survey indicates that: (1) 25 million workers (approximately 16 percent of the workforce) telecommute at least once per month; (2) 50 percent of the current U.S. labor force holds a job

that is compatible with at least part-time telework; and (3) 79 percent of U.S. workers say they would like to work from home at least part of the time.²⁸

To further support this estimate, PDF ES 5.7-6 is provided below to promote telecommuting participation. Encouraging telecommuting and alternative work schedules would result in a 0.2-percent reduction in total vehicle miles traveled/2.2-percent reduction in residential commuter vehicle miles traveled.

- **Road Pricing Management—Improve Traffic Flow (RPT-2):** Traffic signal coordination results in the synchronized operation of multiple consecutive intersections along a roadway corridor or network to enhance the operation of one or more directional movements in a system. Coordination typically includes the ability for signals to communicate between each other and/or a central Traffic Management Center through the use of hard-wire connections or radio frequencies. Special traffic signal timing plans are utilized to maintain progression in one or more directions or to minimize average vehicle delay. PDF ES 5.7-7 is provided below to improve traffic flow and would reduce the emissions associated with operation of Project-related mobile sources by approximately 1.4 percent.

The following PDFs have been incorporated into the Project's design, quantitatively factored into the analysis presented in this section, and will be included in the MMRP to ensure implementation:

PDF ES 5.7-1: No more than 80 percent of all residential units shall contain natural gas-fired fireplaces.

PDF ES 5.7-2: The Project shall produce or cause to be produced renewable electricity, or secure GHG offsets or credits from a public agency (e.g., CARB, SCAQMD) endorsed market, equivalent to the installation of one photovoltaic (i.e., solar) power system no smaller than 2-kilowatt (kW) solar panel for every single-family residence, and for every 1,600 square feet of non-residential roof area. (This PDF is consistent with and implements MM RMDP/SCP GCC-3 and GCC-4.)

PDF ES 5.7-3: The Project will use solar water heaters to provide 100 percent of the heating needs for the public pool at the community recreational center. (This PDF is consistent with and implements MM RMDP/SCP GCC-6.)

PDF ES 5.7-4: The Project Applicant or its designee shall prepare a voluntary Commute Trip Reduction (CTR) program to discourage single-

²⁸ *Latest Telecommuting Statistics (n.d.), www.globalworkplaceanalytics.com/telecommuting-statistics, accessed March 11, 2015.*

occupancy vehicle trips and encourage alternative modes of transportation, such as carpooling, taking transit, walking, and biking. The voluntary CTR program will then be utilized by employers to provide employees with assistance in using alternative modes of travel, and provide both “carrots” and “sticks” to encourage employees. The voluntary CTR program should include all of the following to secure the effectiveness reported by CAPCOA guidance:

- Carpooling encouragement
- Ride-matching assistance
- Preferential carpool parking
- Flexible work schedules for carpools
- Half time transportation coordinator
- Vanpool assistance
- Bicycle end-trip facilities (parking, showers and lockers)

PDF ES 5.7-5: Commercial builders/property owners shall promote ride-sharing through a multi-faceted approach that includes, but is not limited to, the measures below:

- Designating a certain percentage of parking spaces for ride-sharing vehicles that is equivalent to at least one dedicated parking space per 25,000 square feet of office space (verified by County of Los Angeles prior to issuance of building permit(s));
- Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles (verified by County of Los Angeles prior to issuance of building permit(s)); and
- Providing a web site or message board for coordinating rides (implemented during operational phase by property owners).

PDF ES 5.7-6: Any property management company managing commercial property on-site shall require employers with 100 or more employees within the Project Site to develop and implement a telecommuting program consisting of the following elements: (1) appointment of a telecommuting coordinator; (2) identification of specific categories of employment positions that are appropriate for telecommuting; (3) provision of required equipment (e.g., hardware, software, and security); and (4) establishment of communications strategies to facilitate satisfaction of employment responsibilities (e.g., instant messaging).

PDF ES 5.7-7: The Project Applicant or its designee shall work with the applicable agency(ies) with jurisdiction over the local roadway network to facilitate traffic signal coordination along Magic Mountain Parkway from Commerce Center Drive to The Old Road and along The Old Road

from Skyview Lane to the signalized Shopping Center driveway just south of Magic Mountain Parkway.

In addition, the following PDF has been incorporated into the Project's design, but not quantitatively factored into the analysis presented herein because of the inherent uncertainty regarding what percentage of home buyers will elect to install solar energy systems on their single-family residences. This PDF will be included, however, in the MMRP to ensure implementation:

PDF ES 5.7-8: Consistent with the Governor's Million Solar Roofs Plan, the Project Applicant or its designee, acting as the seller of any single-family residence constructed as part of the development of at least 50 homes that are intended or offered for sale, shall offer a solar energy system option to all customers who enter negotiations to purchase a new production home constructed on land for which an application for a tentative subdivision map has been deemed complete. The seller shall disclose the total installed cost of the solar energy system option, and the estimated cost savings. (This PDF is consistent with and implements MM RMDP/SCP GCC-5.)

c. Significance Thresholds

Currently, there are no applicable, adopted numeric thresholds that govern the determination of the significance of a project's GHG emissions under CEQA because neither CARB nor SCAQMD has adopted such CEQA significance thresholds for GHG emissions for land use development projects.²⁹ However, based on Appendix G of the CEQA Guidelines and other relevant criteria, the Los Angeles County Department of Regional Planning has determined that a project would have a potentially significant impact related to GHG emissions based on the following criteria:

Threshold 5.7-1: Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

²⁹ On October 24, 2008, CARB released a "Preliminary Draft Staff Proposal: Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act." However, CARB's draft proposal for residential and commercial projects (see Attachment B to the Preliminary Draft Staff Proposal) was incomplete and no formal action on the proposal was ever taken by CARB's Board. The draft, un-adopted proposal has not been re-visited by CARB since 2008.

Similarly, although SCAQMD convened a stakeholder working group for the development of CEQA significance thresholds for GHGs in 2008, no formal action on the proposal for land use development projects was ever taken by SCAQMD's Board. Further, the stakeholder working group has not been convened by SCAQMD since 2010.

Threshold 5.7-2: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

In order to evaluate the Project's significance relative to these two criteria, five different methodologies are used, as described below. Each of the five methodologies is a separate and independent ground for the significance determination herein.

Methodology 1: In accordance with CEQA Guidelines Sections 15064.4(b)(1) and 15125(a), this section identifies the numeric incremental increase in GHG emissions attributable to the Project, compared to GHG emissions resulting from on-site existing conditions.

Methodology 2: In accordance with CEQA Guidelines Section 15064.4(b)(2)-(3), this section analyzes the Project's consistency with AB 32 by evaluating the Project's GHG emissions relative to BAU conditions, consistent with CARB's Scoping Plan. Utilization of AB 32 (and specifically Health & Safety Code Section 38550) as a benchmark for determining the significance of a project's GHG emissions for purposes of CEQA has been affirmed by California courts (e.g., *Friends of Oroville v. City of Oroville* (2013) 219 Cal.App.4th 832; *Citizens for Responsible Equitable Environmental Development v. City of Chula Vista* (2011) 197 Cal.App.4th 327). Additionally, this approach is identified as one option under Tier 4 of SCAQMD's draft GHG significance thresholds. Further, the approach is consistent with guidance used by other air districts for their CEQA significance assessments, such as the San Joaquin Valley Air Pollution Control District and Sacramento Metropolitan Air Quality Management District.³⁰

As noted above, based on the state-wide growth projections most recently utilized by CARB, achieving AB 32's goals would require approximately a 21.7-percent reduction as compared to BAU conditions. However, this section uses the more conservative value originally identified in CARB's 2008 Scoping Plan (i.e., 28.5 percent, conservatively rounded to 29 percent) to determine the significance of the Project's GHG emissions.

³⁰ SMAQMD, *CEQA Guide*, p. 6-12, November 2014 [SMAQMD's guidance "provides that a 21.7-percent reduction of GHG emissions is adequate mitigation and shows consistency with AB 32 and [CARB] Scoping Plan GHG reduction goals"]; SJVAPCD, *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*, p. 4, December 17, 2009 [SJVAPCD's guidance provides that, "in order to be determined to have a less than significant individual and cumulative impact on global climate changes, such projects must be determined to have reduced or mitigated GHG emissions by 29%, consistent with GHG emission reduction targets established in [CARB's] AB 32 Scoping Plan"].

Methodology 3: In accordance with CEQA Guidelines Section 15064.4(b)(2)-(3), this section analyzes the Project's consistency with AB 32 by comparing a modified emissions inventory for the Project to SCAQMD's draft efficiency target (4.8 MT/year CO₂e per service population).³¹ Utilization of SCAQMD's efficiency target is not required by CEQA (or any other law) as SCAQMD's target only is in draft form; nonetheless, the target is substantial evidence to help inform the lead agency, the public, and the decision-maker of the Project's significance. Also, since AB 32 established a 2020 GHG reduction mandate, this analysis assesses the Project's significance relative to SCAQMD's 2020 efficiency target.

Methodology 4: In accordance with CEQA Guidelines Section 15064.4(b)(3), this section analyzes the Project's consistency with SCAG's adopted Sustainable Communities Strategy (April 2012).

Methodology 5: This Draft EIR also evaluates the Project's consistency with Executive Order No. S-3-05's goal of reducing the State's GHG emissions to 80 percent below the 1990 level by the year 2050. This goal, however, was not adopted as part of the Global Warming Solutions Act of 2006 (AB 32). In addition, in the last legislative session, the California Legislature rejected legislation to enact the Executive Order's 2050 goal.³²

d. Project Impacts

Threshold 5.7-1: Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

When evaluating impacts under Methodology 1, as shown in **Table 5.7-2**, Summary of Existing versus Project GHG Emissions, on page 5.7-31, existing uses within the Project Site emit approximately 13.2 MT CO₂e per year under existing conditions, and the Project uses would emit about 49,012 MT CO₂e per year. As such, the Project would increase the emissions level by approximately 48,999 metric tonnes of CO₂e per year.

³¹ SCAQMD's current draft definition of "service population" results in an indirect, negative bias for projects with high numbers of "customers" or "visitors," such as projects with non-residential uses like retail, hospitals and medical offices. Under the draft definition, the GHG emissions generated by customers and visitors are included in the total emissions, but the number of visitors and customers is excluded from the service population. In order to ensure that the assessment provided is equivalent (i.e., that the defined emissions correlate to the defined service population), this analysis excludes customers and visitors from both the emissions total and the service population.

³² See *Cleveland National Forest Foundation v. San Diego Association of Governments* (2014) 231 Cal.App.4th 1056, 1096 (J. Benke, dissenting); *Professional Engineers in California Government v. Schwarzenegger* (2010) 50 Cal.4th 989, 1015; and see Office of Planning and Research, *Guide to the California State Executive Branch* (Oct. 2004), p. 8.

**Table 5.7-2
Summary of Existing versus Project GHG Emissions**

Category	CO ₂ e Emissions ^a	
	Existing Conditions (MT/year)	Project (MT/year)
Area	0	331
Building Energy Use	0	5,713
Water Use	11.2	1,167
Waste Disposed	0	1,800
Traffic	0.5	39,641
Other ^b	1.4	0
<i>Subtotal</i>	<i>13.2</i>	<i>48,652</i>
Construction Amortized ^c	0	317
Vegetation Amortized ^c	0	43
<i>Subtotal</i>	<i>13.2</i>	<i>360</i>
Total	13.2	49,012
Project Increase Over Existing Conditions		48,999
<p>Numbers may not sum exactly due to rounding.</p> <p>^a CO₂e includes CO₂, CH₄, and N₂O emissions, which are weighted by their respective global warming potentials.</p> <p>^b Includes N₂O emissions associated with fertilizer user for agricultural operations.</p> <p>^c One-time emissions from construction and vegetation removal were amortized over a 30-year period.</p> <p>Source: Tables ES-1 and ES-2 of the GHG Report provided in Appendix 5.7A of this Draft EIR.</p>		

While the Project would result in an obvious change to the existing GHG emissions from the Project Site, as previously discussed, there is no scientific or regulatory consensus regarding what particular quantity of GHG emissions is considered significant, and there remains no applicable, adopted numeric threshold for assessing the significance of a project's emissions.³³ Furthermore, the global scale of climate change makes it difficult to assess the significance of a single project, particularly one designed to accommodate anticipated population growth.³⁴ Indeed, unlike criteria pollutants, GHG

³³ See, *supra*, footnotes 2, 3, and 28.

³⁴ See, e.g., Council on Environmental Quality, *Revised Draft Guidance on the Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews*, p. 2, December 2014 ["Climate change is a particularly complex challenge given its global nature and inherent interrelationships among its sources, causation, mechanisms of action, and impacts ..."].

emissions and climate change are not localized effects, and their magnitude cannot be quantified locally.³⁵

Also, it should be noted that “AB 32 demonstrates California’s commitment to reducing GHG emissions and the state’s associated contribution to climate change, without intent to limit population or economic growth within the state.”³⁶ As a result, there are negative policy implications arising from the utilization of a uniform numeric threshold because of its potential to conflict with projected population and economic growth. Indeed, CEQA is not a policy tool to control population or economic growth, and, the future residents and occupants of development enabled by this Project would exist and live somewhere else even if this Project were not approved.³⁷

In summary then, this numeric increase of approximately 48,999 metric tonnes of CO₂e per year, alone, is not a sufficiently informative or reliable indicator of the significance of the Project’s GHG emissions. Therefore, as discussed below, this section considers two other metrics for analyzing the significance of the Project’s GHG emissions under Threshold 5.7-1 and an additional two metrics for analyzing the significance of the Project’s GHG emissions under Threshold 5.7-2.

For purpose of evaluating the significance of the Project’s GHG emissions under Methodologies 2 and 3, this section considers: (1) whether the Project’s emissions “exceed a threshold of significance that the lead agency determines applies;” and (2) “the extent to which the [P]roject complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of [GHG] emissions” in accordance with CEQA Guidelines Section 15064.4(b)(2)-(3). In assessing the Project’s significance under these two methodologies, reference is made to AB 32, and whether the Project’s additional GHG emissions would impair the State’s ability to achieve its 2020 emissions reduction target (i.e., reduce emissions to 1990 level by 2020).

³⁵ See, e.g., CAPCOA, *CEQA & Climate Change*, p. 22, January 22 [“[U]nlike criteria pollutants where individual districts are characterized by varying levels of pollutant concentrations and source types, [GHG emissions] and their attendant climate change ramifications are a global problem and, therefore, may suggest a uniform approach to solutions that ensure both progress and equity.”].

³⁶ SMAQMD, *CEQA Guide*, p. 6-19, November 2014.

³⁷ CAPCOA, *CEQA & Climate Change* p. 73, January 2008 [“[A] land development project, such as a specific plan, does not necessarily create ‘new’ emitters of GHG, but would theoretically accommodate a greater number of residents in the state. Some of the residents that would move to the project could already be California residents, while some may be from out of state (or would ‘take the place’ of in-state residents who ‘vacate’ their current residences to move to the new project). Some also may be associated with new births over deaths (net population growth) in the state. The out-of-state residents would be contributing new emissions in a statewide context, but would not necessarily be generating new emissions in a global context.”].

When evaluating Project impacts under Methodology 2, this section compares the proposed Project's emissions to the Project's emissions if the Project were built using a BAU approach in terms of design, regulation, and technology. As previously discussed, AB 32 requires the State to return to the 1990 emissions level by 2020, which numerically equates to as much as a 29-percent reduction in GHG emissions from the BAU conditions per CARB's 2008 Scoping Plan. Therefore, if the proposed Project results in at least 29 percent fewer GHG emissions than BAU conditions, the Project is considered consistent with the level of emissions reduction identified by CARB to achieve the AB 32 reduction target (i.e., 29-percent reduction from BAU); and, therefore, impacts would be less than significant.

Table 5.7-3, Summary of BAU and Project Conditions Assumptions, on page 5.7-34 provides a summary of the different methodological assumptions utilized by ENVIRON in calculating the BAU conditions and the Project inventory, including Project design features or PDFs and other relevant Project attributes.

As shown in **Table 5.7-4**, Summary of BAU Versus Project GHG Emissions, on page 5.7-35, the emissions for the Project and its associated BAU conditions are estimated to be 49,012 and 71,901 MT CO₂e per year, respectively, which results in a Project emission reduction of 31.83 percent from the BAU conditions. The Project is consistent with AB 32 and exceeds the level of emissions reduction identified by CARB in the Scoping Plan to achieve AB 32 reduction target (i.e., 29-percent reduction from BAU); and, therefore, impacts would be less than significant.

When evaluating Project impacts under Methodology 3, this section compares the Project's emissions to SCAQMD's draft, project-level efficiency target for 2020 of 4.8 MT/year CO₂e per service population. The "service population" is defined by SCAQMD to include the total number of residents and employees on a project site. Under SCAQMD's draft approach, the emissions from customers and visitors are included in the total land use-related emissions, but excluded from the service population. This draft approach leads to a negative bias for projects with high numbers of customers or visitors, such as retail uses, hospitals, and medical offices, since the total emissions (i.e., emissions associated with customers, visitors, employees, and residents, including mobile emissions) are compared with only the emissions from the service population (residents and employees). Thus, when assessing the Project's GHG emissions using this methodology, a modified emissions inventory for the Project is compared to SCAQMD's draft efficiency target. Specifically, the modified emissions inventory for the Project used herein evaluates the emissions associated with the Project's service population (employees and residents) since the mobile source emissions associated with customers and visitors are excluded from the SCAQMD's draft definition of service population.

**Table 5.7-3
Summary of BAU and Project Conditions Assumptions**

	BAU Conditions	Project Conditions^a
Electricity CO ₂ Intensity Factor	Assumes CalEEMod default SCE intensity factor.	Assumes SCE intensity factor adjusted for 33% Renewable Portfolio Standard.
Vehicle Trips		
Number of Trips Generated	[Based on the trip rates presented in the Project's traffic study (see Appendix 5.20A).]	[Based on the trip rates presented in the Project's traffic study (see Appendix 5.20A).]
Trip Reductions	<ul style="list-style-type: none"> Assumes that a 0.2-percent reduction in total trips would occur due to an estimated level of telecommuting by residents. 	<ul style="list-style-type: none"> Assumes that an 8.85-percent reduction in total trips would occur due to the implementation of PDFs and other Project attributes identified in Table 1 in Appendix D of the GHG Report.
Vehicle Emission Factor	Assumes LCFS, Pavley, and ACC regulations are not in place.	<ul style="list-style-type: none"> Assumes LCFS, Pavley, and ACC regulations are in place.
Fireplaces	<ul style="list-style-type: none"> Assumes no wood-burning fireplaces based on SCAQMD regulation. Assumes 10 percent of dwelling units have no natural gas-fired fireplaces consistent with CalEEMod default. Assumes remaining 90 percent of dwelling units have natural gas-fired fireplaces. 	<ul style="list-style-type: none"> Assumes no wood-burning fireplaces based on SCAQMD regulation. Assumes 20 percent of dwelling units have no natural gas-fired fireplaces. Assumes remaining 80 percent of dwelling units have natural gas-fired fireplaces.
Energy Use	<ul style="list-style-type: none"> Assumes Title 24—2005. Assumes recreational swimming pool is heated by natural gas. 	<ul style="list-style-type: none"> Assumes Title 24—2013. Assumes recreational swimming pool is heated by solar powered energy. Assumes solar panels on a portion of the residential and commercial land uses.
Water Use	<ul style="list-style-type: none"> Assumes water usage 20 percent higher than the Project to account for the Project's compliance with CALGreen. Assumes no recycled water use. 	<ul style="list-style-type: none"> Assumes Project's water demand, which is based on compliance with CALGreen. Assumes recycled water use.
Solid Waste Generation	<ul style="list-style-type: none"> Assumes 50 percent waste diversion (actual 2012 disposal rates for the city of Santa Clarita). 	<ul style="list-style-type: none"> Assumes 75 percent waste diversion.
Vegetation	<ul style="list-style-type: none"> Assumes additional 4,000 trees planted on the Project Site. 	<ul style="list-style-type: none"> Same assumption.
<p>^a The PDFs quantitatively incorporated in the emissions inventory data are PDF ES 5.7-1 through PDF ES 5.7-7.</p> <p>Source: Table 28 of the GHG Report provided in Appendix 5.7A.</p>		

**Table 5.7-4
Summary of BAU Versus Project GHG Emissions**

Category ^a	BAU (MT/year)	CO ₂ e Emissions ^a	
		Project (MT/year)	% Reduction of Project from BAU
Area	369	331	-10.29%
Energy Use	8,755	5,713	-34.75%
Water Use	1,620	1,167	-27.94%
Waste Disposed	3,600	1,800	-50.00%
Traffic	57,196	39,641	-30.69%
<i>Subtotal</i>	<i>71,541</i>	<i>48,652</i>	<i>-31.99%</i>
Construction Amortized ^b	317	317	0.00%
Vegetation Amortized ^b	43	43	0.00%
<i>Subtotal</i>	<i>360</i>	<i>360</i>	<i>0.00%</i>
Total	71,901	49,012	-31.83%
<p>^a CO₂e includes CO₂, CH₄, and N₂O emissions, which are weighted by their respective global warming potentials.</p> <p>^b One-time emissions from construction and vegetation removal were amortized over a 30-year period.</p> <p>Source: Table ES-3 of the GHG Report provided in Appendix 5.7A of this Draft EIR.</p>			

As shown in **Table 5.7-5**, Assessment of Project GHG Emissions with Draft SCAQMD Efficiency Target, on page 5.7-36, the Project would emit 4.67 MT/year CO₂e per service population. This is lower than the SCAQMD's draft target (4.8 MT/year CO₂e per service population), such that the Project would result in a less than significant impact under this methodology.

Finally, as previously discussed, the Project incorporates certain design features and other attributes that exceed existing regulatory requirements, including limiting the number of natural gas-fired fireplaces, installing solar panels or purchasing equivalent carbon offsets/credits, installing a solar-heated swimming pool at the community recreational center, and improving the traffic network and promoting alternative transportation measures. These design features are included in the Project's GHG calculations, and the emission reduction benefits of each feature is shown in **Table 5.7-6**, Summary of GHG Emission Reductions Due to PDFs and Other Technological and Statewide Initiatives, on page 5.7-37. This table also illustrates the emission reduction benefits of various technological advancements and statewide planning, policy, and regulatory initiatives.

**Table 5.7-5
Assessment of Project GHG Emissions with Draft SCAQMD Efficiency Target**

Category	CO ₂ e Emissions ^a 2020 Project without Customer Trips (MT/year)
Area	331
Energy Use	5,713
Water Use	1,167
Waste Disposed	1,800
Traffic ^b	27,807
<i>Subtotal</i>	<i>36,819</i>
Construction Amortized ^c	317
Vegetation Amortized ^c	43
<i>Subtotal</i>	<i>360</i>
Total	37,179
Service Population ^d	7,967
Emissions per Service Population with Amortized Emissions	4.67
SCAQMD Efficiency Target Threshold	4.8
Above Threshold?	No
<p>^a CO₂e includes CO₂, CH₄, and N₂O emissions, which are weighted by their respective global warming potentials.</p> <p>^b Traffic-related emissions for the Project's regional shopping center and strip mall land use categories were adjusted to remove the contribution of customer trips consistent with the defined service population, which excludes customers and visitors. The traffic-related emissions for these land uses still include those associated with the workers at these land uses, as the workers are included in the defined service population.</p> <p>^c One-time emissions from construction and vegetation removal were amortized over a 30-year period.</p> <p>^d The "Service Population" includes residents (5,288) and workers (2,679).</p> <p>Source: Table ES-5 of the GHG Report provided in Appendix 5.7A.</p>	

Threshold 5.7-2: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

For purposes of evaluating Project impacts under Methodology 4, this section evaluates the Project's consistency with SCAG's Sustainable Communities Strategy. At the regional level, SCAG's Sustainable Communities Strategy is an applicable plan adopted for the purpose of reducing GHGs. In order to assess the Project's potential to

**Table 5.7-6
Summary of GHG Emission Reductions Due to PDFs and Other Technological and Statewide Initiatives**

PDF Number	CO ₂ e Emissions	
	PDF Description	Reduction Due to PDF (MT/year)
PDF ES 5.7-1	Reducing Number of Dwelling Units with Natural Gas-Fired Fireplaces from 90 percent to 80 percent	38
PDF ES 5.7-2	Installing Solar Panels on Residential and Commercial Rooftops or Purchasing Equivalent Carbon Offsets/Credits	436
PDF ES 5.7-3	Using Solar Heating for Pool at Recreational Center	299
PDF ES 5.7-4 through PDF ES 5.7-7 and Other Attributes ^a	Collection of Transportation Demand Management (TDM) Measures	3,856
Other Initiatives	Initiative Description	Reduction Due to Initiative (MT/year)
33% RPS—Energy Emissions	Carbon Dioxide Equivalent (CO ₂ e) Intensity Factor with a 33% Renewables Portfolio Standard (RPS)	1,193
33% RPS—Water Emissions		259
2013 Title 24 Standard—Energy Emissions	2013 Building Energy Efficiency Standards (Title 24, Part 6)	1,115
Pavley—Mobile Emissions	Higher Fuel Efficiency Regulatory Standard for Cars and Light-Duty Vehicles	8,049
LCFS—Mobile Emissions	Low Carbon Fuel Standard	4,924
ACC—Mobile Emissions	Advanced Clean Cars Program	850
20% Reduction in Indoor Water Use from CalGreen Building Standards—Water Emissions	20 Percent Reduction for Indoor Water Consumption per CalGreen Building Standards (Title 24, Part 11)	154
75% Solid Waste Diversion—Waste Emissions	75 Percent Solid Waste Diversion via Reduction, Recycling or Composting by 2020	1,800
Recycled Water	Increased Recycled Water Usage by 0.2 million acre-feet per Year by 2020	39
<p>^a The PDFs and other attributes accounted for in this table row are those corresponding to the following CAPCOA transportation-related GHG reduction strategies: TST-3; SDT-1; SDT-2; TRT-1; TRT-3; TRT-6; and, RPT-2.</p> <p>Source: Table ES-4 of the GHG Report provided in Appendix 5.7A.</p>		

conflict with SCAG's Sustainable Communities Strategy, this section analyzes the Project's land use assumptions for consistency with those utilized by SCAG in its Sustainable Communities Strategy. Specifically, the Project's land use assumptions were evaluated by

reference to the number of households in SCAG's traffic analysis zones (TAZs) for the Project Applicant's Westside area, which is defined as including the Newhall Ranch Specific Plan area, along with the adjacent Entrada South, Entrada North, Legacy Village and Commerce Center areas. Based on that evaluation (see Appendix F of the GHG Report for further discussion), the Sustainable Communities Strategy's household data (29,776 units) is comparable to the household data (30,178 units) that represents the total amount of planned development for the Project Applicant's Westside area, all other known planned and proposed development projects, and existing land uses. Additionally, a policy-level consistency analysis, presented in **Table 5.7-7**, Entrada South Consistency Analysis—SCAG's Sustainable Communities Strategy, on page 5.7-39, shows that the Project would be consistent with the actions and strategies contained in the Sustainable Communities Strategy.

Because the Project is consistent with the household projections, land use development pattern, and policies contained in SCAG's Sustainable Communities Strategy, the Project would not impair the region's ability to achieve the GHG reductions from light duty vehicles required by SB 375. Therefore, the Project is consistent with the SCAG's Sustainable Communities Strategy.

Separately, for purposes of evaluating Project impacts as they relate to Methodology 5, at the state level, Executive Order S-3-05 is an order from the State's Executive Branch for the purpose of reducing GHG emissions. The Executive Order's goal to reduce GHG emissions to 1990 levels by 2020 was codified by the Legislature as the 2006 Global Warming Solutions Act (AB 32). And, as analyzed above (particularly in connection with Methodologies 2 and 3), the Project is consistent with AB 32. Therefore, the Project does not conflict with this component of the Executive Order.

The Executive Order also establishes a goal to reduce GHG emissions to 80 percent below 1990 levels by 2050. This goal, however, was not codified. That being said, studies have shown that, in order to meet the 2050 target, aggressive technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. In its Scoping Plan, CARB acknowledged that the "measures needed to meet the 2050 are too far in the future to define in detail."³⁸ In the First Update, however, CARB generally described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest

³⁸ CARB, *Scoping Plan*, p. 117, December 2008.

Table 5.7-7
Entrada South Consistency Analysis—SCAG’s Sustainable Communities Strategy

Actions and Strategies	Responsible Party(ies)	Consistency Analysis ^a
Land Use Actions and Strategies		
Coordinate ongoing visioning efforts to build consensus on growth issues among local governments and stakeholders.	SCAG	Not Applicable. The responsible party identified in the Sustainable Communities Strategy for implementation of this action/strategy is SCAG. Nonetheless, the County, which is the lead agency for the Project, regularly coordinates with SCAG on regional growth issues.
Provide incentives and technical assistance to local governments to encourage projects and programs that balance the needs of the region.	SCAG	Not Applicable. The responsible party identified in the Sustainable Communities Strategy for implementation of this action/strategy is SCAG. Nonetheless, the County, which is the lead agency for the Project, regularly coordinates with SCAG on its advancement of projects and programs that meet regional needs. Furthermore, the Project would support this measure by providing needed housing, employment opportunities, and supportive uses and amenities, such as a school and park, that would serve not just Project residents but the community at large.
Collaborate with local jurisdictions and agencies to acquire a regional fair share housing allocation that reflects existing and future needs.	SCAG Local Jurisdictions HCD	Consistent. As discussed further in Section 5.14 , Population, Housing, and Employment, of this Draft EIR, the Project would accommodate regional growth projected by SCAG in the Santa Clarita Valley Planning Area and northern Los Angeles County by providing needed housing within an infill site that is adjacent to existing, approved, and planned infrastructure, urban services, transportation corridors, transit facilities, and major employment centers, in furtherance of SB 375 policies.
Expand Compass Blueprint program to support member cities in the development of bicycle, pedestrian, Safe Routes to Schools, Safe Routes to Transit, and ADA Transition plans.	SCAG State	Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are SCAG and the State of California. In any event, the Project includes a network of bike and pedestrian trails, as well as transit stops to promote alternative transportation. To minimize and shorten vehicle trips, the majority of proposed homes would be within walking distance of the Project’s commercial (retail/office) areas, school, park, and trail system. The Project Site is also located near Valencia Commerce Center, one of the largest employment centers in the Santa Clarita Valley. Bike and pedestrian trails within the Project Site would connect to the Newhall Ranch Specific Plan trail system to the west and the existing community of Westridge to the south. Additionally, the Project would be integrated with the Santa Clarita transit system by including bus stops to encourage residents to rely

Table 5.7-7 (Continued)
Entrada South Consistency Analysis—SCAG’s Sustainable Communities Strategy

Actions and Strategies	Responsible Party(ies)	Consistency Analysis ^a
<p>Continue to support, through Compass Blueprint, local jurisdictions and sub-regional COGs adopting neighborhood-oriented development, suburban villages, and revitalized main streets as livability strategies in areas not served by high-quality transit.</p>	<p>SCAG State Local Jurisdictions COGs</p>	<p>less on individual vehicular travel.</p> <p>Consistent. The Project contains neighborhood-oriented, mixed-use development coupled with livability strategies, including the establishment of a diverse system of pedestrian and bicycle trails to promote interconnectivity between various areas on the Project Site as well as the Newhall Ranch Specific Plan trail system to the west and the Westridge community to the south.</p>
<p>Encourage the use of range-limited battery electric and other alternative fueled vehicles through policies and programs, such as, but not limited to, neighborhood oriented development, complete streets, and Electric (and other alternative fuel) Vehicle Supply Equipment in public parking lots.</p>	<p>Local Jurisdictions COGs SCAG CTCs</p>	<p>Consistent. While the use of alternatively-fueled vehicles by the Project’s future residents and occupants is market driven and beyond the direct control or influence of the Project Applicant, the Project would not impair the County’s or SCAG’s ability to encourage the use of alternatively-fueled vehicles through various policies and programs. In support of the Complete Streets Act of 2008 (AB 1358), the Project would include an extensive bike and pedestrian trail network linking the residential, commercial (retail/office), school, and park uses on-site and connecting to adjacent communities. Many of the trails would be separated from roadways to ensure the safety of bicyclists and pedestrians. Additionally, a pedestrian bridge across Magic Mountain Parkway would be provided to reduce conflicts with vehicles. The Project also includes preferential parking for carpools and vanpools, as well as a ride-sharing program with dedicated parking areas, as detailed in PDF ES 5.7-4 and PDF ES 5.7-5.</p>
<p>Continue to support, through Compass Blueprint, planning for new mobility modes such as range-limited Neighborhood Electric Vehicles (NEVs) and other alternative fueled vehicles.</p>	<p>SCAG State</p>	<p>Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are SCAG and the State of California. However, as noted above, the Project would not impair any jurisdiction’s ability to encourage the use of alternatively-fueled vehicles.</p>
<p>Collaborate with the region’s public health professionals to enhance how SCAG addresses public health issues in its regional planning, programming, and project development activities.</p>	<p>SCAG State Local Jurisdictions</p>	<p>Consistent. The Project would not impair the County’s, SCAG’s, or the State’s ability to collaborate with the region’s public health professionals regarding the integration of public health issues in regional planning. Additionally, the Project would encourage healthy lifestyles through the provision of an extensive bike and pedestrian trail network on-site. The Project would also incorporate measures to reduce air emissions and greenhouse gasses, minimize hazards, and ensure water quality (see Section 5.3, Air Quality; Section 5.7,</p>

Table 5.7-7 (Continued)
Entrada South Consistency Analysis—SCAG’s Sustainable Communities Strategy

Actions and Strategies	Responsible Party(ies)	Consistency Analysis ^a
		Greenhouse Gas Emissions; Section 5.8 , Hazards and Hazardous Materials; and Section 5.10 , Hydrology and Water Quality—Water Quality, of this Draft EIR for further discussion).
Support projects, programs, and policies that support active and healthy community environments that encourage safe walking, bicycling, and physical activity by children, including, but not limited to development of complete streets, school siting policies, joint use agreements, and bicycle and pedestrian safety education.	Local Jurisdictions SCAG	Consistent. As previously discussed, the Project would establish a diverse system of pedestrian and bicycle trails segregated from vehicular traffic to promote interconnectivity between the various areas of the Project Site (including the proposed school), provide access to the on-site amenities, link to the Newhall Ranch Specific Plan trail system to the west and the Westridge community to the south, and serve as an alternative to automobile use. Additionally, the Project would provide a public neighborhood park and private neighborhood recreation centers of adequate size and with appropriate amenities to serve the needs of Project residents and the local community. Also see the discussion of complete streets, above.
Seek partnerships with state, regional, and local agencies to acquire funding sources for innovative planning projects.	Local Jurisdictions SCAG State	Consistent. The Project would not impair the County’s, SCAG’s or the State’s ability to seek partnerships in furtherance of funding acquisition. Additionally, the Project would support this measure by providing needed housing, employment opportunities, and supportive uses and amenities such as a school and park that would serve not just Project residents but the community at large.
Update local zoning codes, General Plans, and other regulatory policies to accelerate adoption of land use strategies included in the 2012–2035 RTP/SCS Plan Alternative, or that have been formally adopted by any subregional COG that is consistent with regional goals.	Local Jurisdictions	Consistent. While not necessarily applicable on a project-specific basis, the Project would support this action/strategy via consistency with the County’s recently adopted Area Plan (see consistency analysis provided in Table 2 , Area Plan Consistency Analysis, in Appendix 5.11 of this Draft EIR, which incorporates land use strategies set forth in the 2012–2035 RTP/SCS. Further, the TAZs utilized by SCAG that encompass the Project Site contain household data that is generally consistent with the number of planned residential units depicted by the Project Applicant’s and County’s data on an aggregate level (see Appendix F of the GHG Report for further discussion).
Update local zoning codes, General Plans, and other regulatory policies to promote a more balanced mix of residential, commercial, industrial, recreational and institutional uses located to provide options and to	Local Jurisdictions	Consistent. While not necessarily applicable on a project-specific basis, the Project would support this action/strategy by creating a mixed-use community comprised of complementary and mutually supportive land uses that offer housing, employment, shopping, recreation, and other community-serving activities and opportunities.

Table 5.7-7 (Continued)
Entrada South Consistency Analysis—SCAG’s Sustainable Communities Strategy

Actions and Strategies	Responsible Party(ies)	Consistency Analysis^a
contribute to the resiliency and vitality of neighborhoods and districts.		
Support projects, programs, policies and regulations that encourage the development of complete communities, which includes a diversity of housing choices and educational opportunities, jobs for a variety of skills and education, recreation and culture, and a full-range of shopping, entertainment and services all within a relatively short distance.	Local Jurisdictions SCAG	Consistent. As noted above, the Project would create a complete mixed-use community comprised of mutually supportive land uses that offer housing, employment, shopping, recreation, and other community-serving activities and opportunities. Additionally, the Project includes a range of residential housing types, sizes, and styles to serve the needs of a growing and increasingly diverse population within the County and the region. The Project’s housing and employment opportunities would also serve to accommodate the projected increase of more than 70,000 households in northern Los Angeles County between 2012 and 2035.
Pursue joint development opportunities to encourage the development of housing and mixed-use projects around existing and planned rail stations or along high-frequency bus corridors, in transit-oriented development areas, and in neighborhood-serving commercial areas.	Local Jurisdictions CTCs	Consistent. The Project would accommodate regional growth projected by SCAG in the Valley Planning Area and northern Los Angeles County within an infill site that is adjacent to existing, approved, and planned infrastructure, urban services, transportation corridors, transit facilities, and major employment centers in furtherance of SB 375 policies. Transit would be promoted in the Project’s traditional neighborhood design and would include on-site bus stops.
Working with local jurisdictions, identify resources that can be used for employing strategies to maintain and assist in the development of affordable housing.	SCAG Local Jurisdictions	Consistent. The Project includes a range of residential housing types, sizes, and styles to serve the needs of a growing and increasingly diverse population within the County and the region.
Consider developing healthy community or active design guidelines that promote physical activity and improved health.	Local Jurisdictions	Consistent. As discussed above, the Project would encourage healthy lifestyles through the provision of an extensive bike and pedestrian trail network on-site. The Project complies with County Healthy Design Ordinances recently amended to the County Zoning Ordinance. Additionally, the Project would provide a public neighborhood park and private neighborhood recreation centers of adequate size and with appropriate amenities to serve the recreational needs of Project residents and the local community. Also see the discussion of complete streets, above.
Support projects, programs, policies, and regulations to protect resources areas, such as natural habitats and farmland, from future	Local Jurisdictions SCAG	Consistent. The Project includes 101.7 acres of open space, as well as a 27.2-acre preserve for the San Fernando Valley spineflower, which would remain in their natural condition. The Project has

Table 5.7-7 (Continued)
Entrada South Consistency Analysis—SCAG’s Sustainable Communities Strategy

Actions and Strategies	Responsible Party(ies)	Consistency Analysis ^a
development.		been designed to respect many of the natural resources and features on site, in accordance with the previously adopted Spineflower Conservation Plan, with grading that generally follows the natural topographic trends on site, natural-looking improvements such as debris and water quality basins that incorporate vegetation or water features, and a major canyon (Unnamed Canyon 2) that would be restored as an open, vegetated drainage channel. Although oak trees would be removed, an estimated 25 regulation-size oak trees would be preserved, and up to 158 new oak trees of 15-gallon size would be planted per the County’s Oak Tree Ordinance and current County practices (refer to Section 5.4 , Biological Resources, of this Draft EIR for further discussion). With respect to agricultural land, as discussed in Section 5.2 , Agricultural and Forest Resources, Project mitigation would ensure the conservation of no less than 6.2 acres of designated Prime Farmland within the Project Applicant’s other property holdings.
Create incentives for local jurisdictions and agencies that support land use policies and housing options that achieve the goals of SB 375.	State SCAG	Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are SCAG and the State of California. In any event, the Project would be consistent with the goals of SB 375 as demonstrated by this policy-level analysis and allocation of future growth to the Project vicinity in SCAG’s RTP/SCS overall land use pattern maps. The Project design also would be consistent with the SB 375 goal to reduce vehicle miles travelled, and the corresponding emission of GHGs, through the development of more effective and efficient communities.
Continue partnership with regional agencies to increase availability of state funding for integrated land use and transportation projects in the region.	State SCAG	Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are SCAG and the State of California. The Project would not impair the ability of SCAG and the State to increase the availability of funding for certain types of projects. As previously discussed, the proposed uses would be developed on a site with convenient regional access via the I-5 and SR-126 freeways, thus integrating land use and transportation. The Project would include an on-site circulation network and additional off-site transportation improvements (as mitigation) to facilitate mobility and access within the Project vicinity.

Table 5.7-7 (Continued)
Entrada South Consistency Analysis—SCAG’s Sustainable Communities Strategy

Actions and Strategies	Responsible Party(ies)	Consistency Analysis^a
Engage in a strategic planning process to determine the critical components and implementation steps for identifying and addressing open space resources, including increasing and preserving park space, specifically in park-poor communities.	Local Jurisdictions SCAG	Consistent. The Project would not impair the ability of the County and SCAG to engage in strategic planning processes to address recreational/park shortages in existing communities. As previously discussed, the Project is a mixed-use, planned community that includes 101.7 acres of open space, as well as a 27.2-acre preserve for the San Fernando Valley spineflower, which would remain in their natural condition. Additionally, the Project would provide a public neighborhood park with appropriate amenities to serve the recreational needs of Project residents and the local community.
Identify and map regional priority conservation areas for potential inclusion in future plans.	SCAG	Not Applicable. The responsible party identified in the Sustainable Communities Strategy for implementation of this action/strategy is SCAG. The Project would not impair SCAG’s ability to implement this action/strategy.
Engage with various partners, including CTCs and local agencies, to determine priority conservation areas and develop an implementable plan.	SCAG CTCs	Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are SCAG and CTCs. The Project would not impair the ability of SCAG and CTCs to engage with various partners on issues pertaining to conservation areas.
Develop regional mitigation policies or approaches for the 2016 RTP.	SCAG CTCs	Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are SCAG and CTCs. The Project would not impair the ability of SCAG and CTCs to develop regional mitigation policies or approaches for the future 2016 RTP. However, it is noted that the Project Applicant has substantial land holdings in the western Santa Clarita Valley and continues to plan future development within these areas in an integrated manner so as to address infrastructure, public services, and mitigation on a broad level. Further, development of several of the Applicant’s projects will occur under the auspices of the adopted RMDP and SCP, which are coordinated mitigation programs for reducing cumulative impacts to certain biological resources, including the Santa Clara River and San Fernando Valley Spineflower, to less-than-significant levels.
<i>Transportation Network Actions and Strategies</i>		
Perform and support studies with the goal of identifying innovative transportation strategies that enhance mobility and air quality, and determine practical steps to pursue such strategies, while	SCAG CTCs	Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are SCAG and CTCs. The Project would not impair the ability of SCAG and CTCs to perform and support various studies. As previously discussed, the proposed uses

Table 5.7-7 (Continued)
Entrada South Consistency Analysis—SCAG’s Sustainable Communities Strategy

Actions and Strategies	Responsible Party(ies)	Consistency Analysis^a
engaging local communities in planning efforts.		would be developed on a site with convenient regional access via the I-5 and SR-126 freeways. The Project would include an on-site circulation network and additional off-site transportation improvements (as mitigation) to facilitate mobility and access within the Project vicinity. By combining proposed residential, commercial (retail/office), school, and park uses on-site, the Project would serve to reduce vehicle trips and thus vehicle miles travelled, thereby contributing to a reduction in air pollutant emissions.
Cooperate with stakeholders, particularly county transportation commissions and Caltrans, to identify new funding sources and/or increased funding levels for the preservation and maintenance of the existing transportation network.	SCAG CTCs Local Jurisdictions	Consistent. While not necessarily applicable on a project-specific basis, the Project would support this action/strategy by providing an on-site circulation network and additional off-site transportation improvements (as mitigation) to improve local access, with appropriate design considerations to ensure travel safety and reliability. All such improvements would be constructed in accordance with County Public Works and/or Caltrans requirements, as appropriate. It is also noted that the Project would mitigate any significant impacts to local and regional roadways to the extent feasible, as required by CEQA.
Expand the use of transit modes in our subregions such as BRT, rail, limited-stop service, and point-to-point express services utilizing the HOV and HOT lane networks.	SCAG CTCs Local Jurisdictions	Consistent. The Project includes on-site bus stops to expand the use of transit modes and would not impair the ability of SCAG, the CTCs, or the County to expand and extend the use of other transit modes to the Project Site (bus stop locations will be determined in consultation with Santa Clarita Transit). Of note, HOV lanes are currently being developed along I-5 within the Project vicinity.
Encourage transit providers to increase frequency and span of service in TOD/HQTA and along targeted corridors where cost-effective and where there is latent demand for transit usage.	SCAG CTCs	Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are SCAG and CTCs. The Project would not impair the ability of SCAG and CTCs to encourage transit providers to increase the frequency and span of service.
Encourage regional and local transit providers to develop rail interface services at Metrolink, Amtrak, and high-speed rail stations.	SCAG CTCs Local Jurisdictions	Consistent. While this action/strategy is not necessarily applicable on a project-specific basis, the Project would not impair the ability of SCAG, CTCs, or the County to encourage rail interface services. Of note, a high speed rail line is planned within the Santa Clarita Valley.
Expand the Toolbox Tuesdays program to include bicycle safety design, pedestrian safety design, ADA design, training on how to	SCAG State	Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are SCAG and the State of California. However, the Project would

Table 5.7-7 (Continued)
Entrada South Consistency Analysis—SCAG’s Sustainable Communities Strategy

Actions and Strategies	Responsible Party(ies)	Consistency Analysis^a
use available resources that expand understanding of where collisions are happening, and information on available grant opportunities to improve bicycle and pedestrian safety.		support this action/strategy by providing an extensive bike and pedestrian trail network linking the various uses on-site and connecting to adjacent communities, consistent with AB 1358. Many of the trails would be separated from roadways, and a pedestrian bridge across Magic Mountain Parkway would be provided to ensure the safety of bicyclists and pedestrians.
Prioritize transportation investments to support compact infill development that includes a mix of land uses, housing options, and open/park space, where appropriate, to maximize the benefits for existing communities, especially vulnerable populations, and to minimize any negative impacts.	SCAG CTCs Local Jurisdictions	Consistent. As discussed above, the Project represents infill development offering a complete mixed-use community comprised of mutually supportive land uses that offer housing, employment, shopping, recreation, and other community-serving activities and opportunities. As also previously discussed, the Project includes 101.7 acres of open space, as well as a 27.2-acre Spineflower Preserve, and would provide a 5.6-acre public neighborhood park with appropriate amenities to serve the recreational needs of Project residents and the local community.
Explore and implement innovative strategies and projects that enhance mobility and air quality, including those that increase the walkability of communities and accessibility to transit via non-auto modes, including walking, bicycling, and neighborhood electric vehicles (NEVs) or other alternative fueled vehicles.	SCAG CTCs Local Jurisdictions	Consistent. As described above, the Project is a pedestrian-oriented and bicycle-friendly, mixed-use development. In support of AB 1358, the Project would include an extensive bike and pedestrian trail network linking the residential, commercial (retail/office), school, and park uses on-site and connecting to adjacent communities. By combining these uses, the Project would serve to reduce vehicle trips and thus vehicle miles travelled, thereby contributing to a reduction in air pollutant emissions.
Collaborate with local jurisdictions to plan and develop residential and employment development around current and planned transit stations and neighborhood commercial centers.	SCAG CTCs Local Jurisdictions	Consistent. Nearly 100 percent of the Project’s residential units would be located within walking distance of existing and proposed neighborhood commercial centers, both on- and off-site, thus reducing the number and length of vehicle trips. The Project Site is also located near Valencia Commerce Center, one of the largest employment centers in the Santa Clarita Valley. Bike and pedestrian trails within the Project Site would connect to the Newhall Ranch Specific Plan trail system to the west and the existing community of Westridge to the south. Additionally, the Project would be integrated with the Santa Clarita transit system by including bus stops to encourage residents to rely less on individual vehicular travel (bus stop locations will be determined in consultation with Santa Clarita Transit).

Table 5.7-7 (Continued)
Entrada South Consistency Analysis—SCAG’s Sustainable Communities Strategy

Actions and Strategies	Responsible Party(ies)	Consistency Analysis^a
Collaborate with local jurisdictions to provide a network of local community circulators that serve new TOD, HQTAs, and neighborhood commercial centers providing an incentive for residents and employees to make trips on transit.	SCAG CTCs Local Jurisdictions	Consistent. As discussed throughout this analysis, the Project includes community-oriented circulation patterns, such as trails and paseos, to connect future residents to neighborhood commercial centers without requiring a fuel-dependent mode of travel. Nearly 100 percent of the Project’s residential units would be located within walking distance of existing and proposed neighborhood commercial centers, both on- and off-site. Additionally, the Project would be integrated with the Santa Clarita transit system by including bus stops to encourage residents to rely less on individual vehicular travel (bus stop locations will be determined in consultation with Santa Clarita Transit).
Similar to SCAG’s partnership with the City of Los Angeles and LACMTA, offer to all County Transportation Commissions a mutually funded, joint first mile/last mile study for each region.	SCAG CTCs	Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are SCAG and CTCs. In any event, the Project would not impair SCAG’s or the CTCs’ ability to offer the mutually-funded study.
Develop first-mile/last-mile strategies on a local level to provide an incentive for making trips by transit, bicycling, walking, or neighborhood electric vehicle or other ZEV options.	CTCs Local Jurisdictions	Consistent. The Project would not impair the CTCs’ or the County’s ability to develop first-mile/last-mile strategies. In support of this action/strategy, the Project would provide a network of bike and pedestrian trails as well as transit stops to promote alternative transportation. Nearly 100 percent of the Project’s residential units would be located within walking distance of existing and proposed neighborhood commercial centers, both on- and off-site.
Encourage transit fare discounts and local vendor product and service discounts for residents and employees of TOD/HQTAs or for a jurisdiction’s local residents in general who have fare media.	Local Jurisdictions	Consistent. The Project would not impair the County’s ability to encourage transit fare and other discounts. Furthermore, businesses located within the commercial (retail/office) areas on-site would have the option of offering transit fare discounts to their employees.
Work with transit properties and local jurisdictions to identify and remove barriers to maintaining on-time performance.	SCAG CTCs Local Jurisdictions	Consistent. The Project would not impair the SCAG’s, CTCs’, or the County’s ability to work with transit properties to remove barriers to on-time performance. To this end, the Project’s on-site circulation network, off-site transportation improvements (as mitigation), and on-site transit stops would be constructed in accordance with County Public Works, Caltrans, and/or transit service providers’ requirements, as appropriate, to ensure safety and reliability and minimize disruptions to transit service.

Table 5.7-7 (Continued)
Entrada South Consistency Analysis—SCAG’s Sustainable Communities Strategy

Actions and Strategies	Responsible Party(ies)	Consistency Analysis^a
Develop policies and prioritize funding for strategies and projects that enhance mobility and air quality.	State	Not Applicable. The responsible party identified in the Sustainable Communities Strategy for implementation of this action/strategy is the State of California.
Work with the California High-Speed Rail Authority and local jurisdictions to plan and develop optimal levels of retail, residential, and employment development that fully take advantage of new travel markets and rail travelers.	State	Not Applicable. The responsible party identified in the Sustainable Communities Strategy for implementation of this action/strategy is the State of California. Of note, a high speed rail line is planned within the Santa Clarita Valley and could be used by the Project’s future residents, employees, and visitors.
Work with state lenders to provide funding for increased transit service in TOD/HQTA in support of reaching SB 375 goals.	SCAG State	Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are SCAG and the State of California.
Continue to work with neighboring Metropolitan Planning Organizations to provide alternative modes for interregional travel, including Amtrak and other passenger rail services and an enhanced bikeway network, such as on river trails.	SCAG State	Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are SCAG and the State of California. It is noted, however, that the Project’s bike and pedestrian trail network would connect to the Newhall Ranch Specific Plan trail system to the west, which includes a segment of the Santa Clara River Trail and thus will connect to other areas of the Santa Clarita Valley.
Encourage the development of new, short haul, cost-effective transit services such as DASH and demand responsive transit (DRT) in order to both serve and encourage development of compact neighborhood centers.	CTCs Municipal Transit Operators	Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are CTCs and Municipal Transit Operators. In support of this action/strategy, the Project would include transit stops that could potentially be used by downtown L.A.’s DASH service or other transit service providers (bus stop locations will be determined in consultation with Santa Clarita Transit).
Work with the state legislature to seek funding for Complete Streets planning and implementation in support of reaching SB 375 goals.	SCAG State	Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are SCAG and the State of California. In support of AB 1358’s complete streets goals, however, the Project would include an extensive bike and pedestrian trail network linking various internal uses and connecting to adjacent communities. Many of the trails would be separated from roadways to ensure the safety of bicyclists and pedestrians. Additionally, a pedestrian bridge across Magic Mountain Parkway would be provided to reduce conflicts with vehicles. The Project also includes preferential parking for carpools and vanpools, as well as a ride-sharing program with dedicated parking areas, as detailed in PDF ES 5.7-4

Table 5.7-7 (Continued)
Entrada South Consistency Analysis—SCAG’s Sustainable Communities Strategy

Actions and Strategies	Responsible Party(ies)	Consistency Analysis^a
<p>Continue to support the California Interregional Blueprint as a plan that links statewide transportation goals and regional transportation and land use goals to produce a unified transportation strategy.</p>	<p>SCAG State</p>	<p>and PDF ES 5.7-5.</p> <p>Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are SCAG and the State of California. Nonetheless, as previously discussed, the Project would integrate land use and transportation concerns via development of a mixed-use community with mutually supportive uses, public services, and amenities, in close proximity to the regional roadway network.</p>
<p><i>Transportation Demand Management (TDM) Actions and Strategies</i></p>		
<p>Examine major projects and strategies that reduce congestion and emissions and optimize the productivity and overall performance of the transportation system.</p>	<p>SCAG</p>	<p>Not Applicable. The responsible party identified in the Sustainable Communities Strategy for implementation of this action/strategy is SCAG. However, in support of this action/strategy, the Project would contribute to a reduction in air pollutant emissions by reducing vehicle trips and vehicle miles travelled through the development of a supportive mix of residential, commercial (retail/office), school, and park uses on-site. In addition, the Project would mitigate any significant impacts to local and regional roadways to the extent feasible, as required by CEQA, which would serve to minimize congestion.</p>
<p>Develop comprehensive regional active transportation network along with supportive tools and resources that can help jurisdictions plan and prioritize new active transportation projects in their cities.</p>	<p>SCAG CTCs Local Jurisdictions</p>	<p>Consistent. The Project would promote the development of a comprehensive regional active transportation network through the provision of a circulation system including an extensive bike and pedestrian trail network on-site. As previously discussed, the on-site trails would connect to the Newhall Ranch Specific Plan trail system to the west, which includes a segment of the Santa Clara River Trail and thus will connect to a more extensive regional trail system.</p>
<p>Encourage the implementation of a Complete Streets policy that meets the needs of all users of the streets, roads and highways—including bicyclists, children, persons with disabilities, motorists, neighborhood electric vehicle (NEVs) users, movers of commercial goods, pedestrians, users of public transportation and seniors—for safe and convenient travel in a manner that is suitable to the suburban and urban contexts within the region.</p>	<p>Local Jurisdictions COGs SCAG CTCs</p>	<p>Consistent. In support of AB 1358, the Project would include an extensive bike and pedestrian trail network linking the residential, commercial (retail/office), school, and park uses on-site and connecting to adjacent communities. Many of the trails would be separated from roadways to ensure the safety of bicyclists and pedestrians. Additionally, a pedestrian bridge across Magic Mountain Parkway would be provided to reduce conflicts with vehicles. The Project also includes preferential parking for carpools and vanpools, as well as a ride-sharing program with dedicated parking areas. In addition, the Project’s on-site circulation network, off-site transportation improvements (as mitigation), and on-site transit stops would be constructed in</p>

Table 5.7-7 (Continued)
Entrada South Consistency Analysis—SCAG’s Sustainable Communities Strategy

Actions and Strategies	Responsible Party(ies)	Consistency Analysis ^a
		accordance with County Public Works, Caltrans, and/or transit service providers’ requirements, as appropriate, to ensure safety and reliability. Finally, the Project includes transit demand management elements, such as those outlined above in PDF ES 5.7-4 through PDF ES 5.7-6, to further enhance mobility.
Support work-based programs that encourage emission reduction strategies and incentivize active transportation commuting or ride-share modes.	SCAG Local Jurisdictions	Consistent. As part of PDF ES 5.7-4 through PDF ES 5.7-6, the Project includes preferential parking for carpools and vanpools, as well as a ride-sharing program with dedicated parking areas, and satellite telecommuting programs.
Develop infrastructure plans and educational programs to promote active transportation options and other alternative fueled vehicles, such as neighborhood electric vehicles (NEVs), and consider collaboration with local public health departments, walking/biking coalitions, and/or Safe Routes to School initiatives, which may already have components of such educational programs in place.	Local Jurisdictions	Consistent. As previously discussed, the Project would establish a diverse system of pedestrian and bicycle trails segregated from vehicular traffic to promote interconnectivity between the various areas of the Project Site (including the proposed school), provide access to the on-site amenities, link to the Newhall Ranch Specific Plan trail system to the west and the Westridge community to the south, and serve as an alternative to automobile use. Additionally, the Project would provide a public neighborhood park and private neighborhood recreation centers of adequate size and with appropriate amenities to serve the needs of Project residents and the local community. Also see the discussion of complete streets, above.
Encourage the development of telecommuting programs by employers through review and revision of policies that may discourage alternative work options.	Local Jurisdictions CTCs	Consistent. The Project includes satellite telecommuting programs for employees as part of PDF ES 5.7-6.
Emphasize active transportation and alternative fueled vehicle projects as part of complying with the Complete Streets Act (AB 1358).	State SCAG Local Jurisdictions	Consistent. As previously discussed, in support of AB 1358, the Project would include an extensive bike and pedestrian trail network linking the residential, commercial (retail/office), school, and park uses on-site and connecting to adjacent communities. Many of the trails would be separated from roadways to ensure the safety of bicyclists and pedestrians. Additionally, a pedestrian bridge across Magic Mountain Parkway would be provided to reduce conflicts with vehicles. The Project also includes preferential parking for carpools and vanpools, as well as a ride-sharing program with dedicated parking areas, as part of PDF ES 5.7-4 and PDF ES 5.7-5.

Table 5.7-7 (Continued)
Entrada South Consistency Analysis—SCAG’s Sustainable Communities Strategy

Actions and Strategies	Responsible Party(ies)	Consistency Analysis ^a
Transportation System Management (TSM) Actions and Strategies		
Work with relevant state and local transportation authorities to increase the efficiency of the existing transportation system.	SCAG Local Jurisdictions State	Consistent. The Project would not impair the ability of SCAG, the County, or the State to work with relevant transportation authorities to increase the efficiency of the existing transportation system. The Project would include an on-site circulation network and additional off-site transportation improvements (as mitigation) to improve local access, with appropriate design considerations to ensure travel safety and reliability. All such improvements would be constructed in accordance with County Public Works and/or Caltrans requirements, as appropriate. Further, the Project would mitigate any significant impacts to local and regional roadways to the extent feasible, as required by CEQA.
Collaborate with local jurisdictions and subregional COGs to develop regional policies regarding TSM.	SCAG COGs Local Jurisdictions	Consistent. The Project would not impair the ability of SCAG, the COGs, or the County to collaborate on the development of regional TSM policies. All Project transportation-related improvements would be developed in consultation with County Public Works, Caltrans, and/or transit service providers, as appropriate, and constructed in compliance with their respective standards.
Contribute to and utilize regional data sources to ensure efficient integration of the transportation system.	SCAG CTCs	Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are SCAG and CTCs. However, as discussed in Section 5.20, Transportation/Traffic , of this Draft EIR, the Project traffic analysis is based on a traffic model developed jointly by the County Department of Public Works and the City of Santa Clarita as the primary tool for forecasting traffic volumes within the Santa Clarita Valley. In addition, SCAG’s regional data, including population, housing, and employment forecasts are used where appropriate throughout this Draft EIR (see, for example, Section 5.14, Population, Housing, and Employment).
Provide training opportunities for local jurisdictions on TSM strategies, such as Intelligent Transportation Systems (ITS).	SCAG Local Jurisdictions	Consistent. While not necessarily applicable on a project-specific basis, the Project would not impair the ability of SCAG or the County to provide TSM strategy training. However, the Project would support transportation system management strategies via the provision of appropriate roadway improvements that meet County Public Works and/or Caltrans requirements, as appropriate; an extensive bike and pedestrian trail network including a pedestrian bridge across Magic Mountain Parkway; and traffic signal synchronization.

Table 5.7-7 (Continued)
Entrada South Consistency Analysis—SCAG’s Sustainable Communities Strategy

Actions and Strategies	Responsible Party(ies)	Consistency Analysis^a
Collaborate with local jurisdictions and subregional COGs to continually update the ITS inventory.	SCAG COGS Local Jurisdictions	Consistent. The Project would not impair the ability of SCAG, the COGs, or the County to collaborate on updates to the ITS inventory. See the discussion above regarding the Project’s support of transportation system management strategies.
Collaborate with CTCs to regularly update the county and regional ITS architecture.	SCAG CTCs Local Jurisdictions	Consistent. The Project does not impair the ability of SCAG, the CTCs, or the County to collaborate on updates to the ITS architecture. See the discussion above regarding the Project’s support of transportation system management strategies.
Collaborate with the state and federal Government and subregional COGs to examine potential innovative TDM/TSM strategies.	SCAG State COGs	Not Applicable. The responsible parties identified in the Sustainable Communities Strategy for implementation of this action/strategy are SCAG, the State of California, and the COGs.
Clean Vehicle Technology Actions and Strategies		
Develop a Regional PEV Readiness Plan with a focus on charge port infrastructure plans to support and promote the introduction of electric and other alternative fuel vehicles in Southern California.	SCAG	Not Applicable. The responsible party identified in the Sustainable Communities Strategy for implementation of this action/strategy is SCAG.
Support subregional strategies to develop infrastructure and supportive land uses to accelerate fleet conversion to electric or other near zero-emission technologies. The activities committed in the two subregions (Western Riverside COG and South Bay Cities COG) are put forward as best practices that others can adopt in the future. (See Appendix: Vehicle Technology, for more information.)	SCAG Local Jurisdictions	Consistent. While the acceleration of fleet conversion by the Project’s future residents and occupants is market driven and beyond the direct control or influence of the Project applicant, the Project would not impair the County’s or SCAG’s ability to support subregional strategies in furtherance of that conversion.
<p>SCAG = Southern California Association of Governments HCD = California Department of Housing and Community Development COG = subregional council of governments CTCs = county transportation commissions TOD = transit-oriented development HQTA = High Quality Transit Area LACMTA = Los Angeles County Metropolitan Transportation Authority</p>		

Table 5.7-7 (Continued)
Entrada South Consistency Analysis—SCAG’s Sustainable Communities Strategy

Actions and Strategies	Responsible Party(ies)	Consistency Analysis ^a
<p>^a “Not Applicable” actions/strategies are those that are not identified for implementation by Local Jurisdictions. The Project’s consistency with any actions/strategies identified for implementation by the Local Jurisdictions (i.e., the County of Los Angeles) is assessed above.</p> <p>Source: SCAG 2012–2035 RTP/SCS, Chapter 4: Sustainable Communities Strategy, Tables 4.3 through 4.7; April 2012.</p>		

technologies immediately.”³⁹ Due to the technological shifts required and the unknown parameters of the regulatory framework in 2050, quantitatively analyzing the Project’s impacts further relative to the 2050 goal is speculative for purposes of CEQA.

Although the Project’s emissions level in 2050 cannot be reliably quantified, statewide efforts are underway to facilitate the State’s achievement of that goal and it is reasonable to expect the Project’s emissions level (49,012 metric tonnes of CO₂e per year) to decline as the regulatory initiatives identified by CARB in the First Update are implemented, and other technological innovations occur. Stated differently, the Project’s emissions total at build-out presented in **Table 5.7-2**, Summary of Existing versus Project GHG Emissions, represents the maximum emissions inventory for the Project as California’s emissions sources are being regulated (and foreseeably expected to continue to be regulated in the future) in furtherance of the State’s environmental policy objectives. As such, given the reasonably anticipated decline in Project emissions once fully constructed and operational, the Project is consistent with the Executive Order’s horizon-year goal.

For example, CARB’s First Update “lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050,” and many of the emission reduction strategies recommended by CARB would serve to reduce the Project’s post-2020 emissions level to the extent applicable by law:^{40,41}

³⁹ CARB, *First Update*, p. 32, May 2014.

⁴⁰ CARB, *First Update*, p. 4, May 2014. See also *id.* at pp. 32–33 [recent studies show that achieving the 2050 goal will require that the “electricity sector will have to be essentially zero carbon; and that electricity or hydrogen will have to power much of the transportation sector, including almost all passenger vehicles.”]

⁴¹ CARB, *First Update*, Table 6: Summary of Recommended Actions by Sector, pp. 94-99, May 2014.

- **Energy Sector:** Continued improvements in California’s appliance and building energy efficiency programs and initiatives, such as the State’s zero net energy building goals, would serve to reduce the Project’s emissions level.⁴² Additionally, further additions to California’s renewable resource portfolio would favorably influence the Project’s emissions level.⁴³
- **Transportation Sector:** Anticipated deployment of improved vehicle efficiency, zero emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to reduce the Project’s emissions level.⁴⁴
- **Water Sector:** The Project’s emissions level will be reduced as a result of further desired enhancements to water conservation technologies.⁴⁵
- **Waste Management Sector:** Plans to further improve recycling, reuse and reduction of solid waste will beneficially reduce the Project’s emissions level.⁴⁶

In addition to CARB’s First Update, in January 2015, during his inaugural address, Governor Jerry Brown expressed a commitment to achieve “three ambitious goals” that he would like to see accomplished by 2030 to reduce the State’s GHG emissions: (1) increasing the State’s Renewable Portfolio Standard from 33 percent in 2020 to 50 percent in 2030; (2) cutting the petroleum use in cars and trucks in half; and (3) doubling the efficiency of existing buildings and making heating fuels cleaner.⁴⁷ These expressions of Executive Branch policy may be manifested in adopted legislative or regulatory action through the state agencies and departments responsible for achieving the State’s environmental policy objectives, particularly those relating to global climate change.

Further, a recent study shows that the State’s existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 60 percent below 1990 levels by 2050. Even though this study did not provide an exact regulatory and technological roadmap to achieve the 2050 goal, it demonstrated that various combinations of policies could allow the statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies

⁴² CARB, *First Update*, pp. 37-39, 85, May 2014.

⁴³ CARB, *First Update*, pp. 40-41, May 2014.

⁴⁴ CARB, *First Update*, pp. 55-56, May 2014.

⁴⁵ CARB, *First Update*, p. 65, May 2014.

⁴⁶ CARB, *First Update*, p. 69, May 2014.

⁴⁷ *Transcript: Governor Jerry Brown’s January 5, 2015, Inaugural Address*, www.latimes.com/local/political/la-me-pc-brown-speech-text-20150105-story.html#page=1, accessed March 11, 2015.

and other regulations not analyzed in the study could allow the State to meet the 2050 target.⁴⁸

Given the proportional contribution of mobile source-related GHG emissions to the State's inventory, recent studies also show that relatively new trends, such as the increasing importance of web-based shopping, the emergence of different driving patterns by the "millennial" generation and the increasing effect of Web-based applications on transportation choices, are beginning to substantially influence transportation choices and the energy used by transportation modes. These factors have changed the direction of transportation trends in recent years, and will require the creation of new models to effectively analyze future transportation patterns and the corresponding effect on GHG emissions.

In its First Update, CARB stated the importance of establishing a mid-term statewide GHG reduction target (i.e., set between 2020 and 2050) to facilitate achievement of the State's long-term GHG reduction goals. To date, however, CARB has not adopted such a target and the Legislature has not authorized one. Nonetheless, for the reasons described above, the Project's post-2020 emissions trajectory is expected to follow a declining trend, consistent with any establishment of a mid-term target. Additionally, as described in connection with the assessment of Project impacts under Methodology 4, the Project has been found to be consistent with the 2035 reduction target established by CARB, pursuant to SB 375, for the SCAG region for purposes of securing GHG emission reductions resulting from vehicle miles traveled by passenger vehicles. As shown in **Table 5.7-2, Summary of Existing versus Project GHG Emissions**, the Project's traffic-related GHG emissions constitute a substantial percentage of the Project's total emissions inventory, such that the Project's consistency with CARB's 2035 SB 375 target for the SCAG region affirms the Project's compatibility with any mid-term GHG reduction goals for mobile sources established by CARB or the Legislature.

At the local level, and as discussed above, the County has not yet adopted a Climate Action Plan for unincorporated areas, such as the Project Site. Therefore, the Project was not evaluated in terms of the County's Climate Action Plan.

In summary, the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and impacts would be less than significant.

⁴⁸ Greenblatt, Jeffrey, *Energy Policy*, "Modeling California Impacts on Greenhouse Gas Emissions" (Vol. 78, pp. 158-172).

4. CUMULATIVE IMPACTS

Although the Project would emit GHGs, the emission of GHGs by a single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHGs from more than one project and many sources in the atmosphere that may combine and result in global climate change.⁴⁹

Here, the Project's GHG emissions also are very small in comparison to state, national and global GHG emissions. Specifically, the Project's percentage contribution to existing international, national, and California-specific GHG emission inventories is 0.0001 percent, 0.0008 percent, and 0.01 percent, respectively. (See Table ES-2 in the GHG Report.) This comparative data is not intended to suggest that the Project's emissions are de minimis; rather, the data is provided for overall context as, generally, it is the *combined* emissions of projects globally that appear to be the primary cause of global climate change, and not any one project.

The State has established a mandate, via AB 32, to reduce cumulative statewide emissions to 1990 levels by 2020, even though statewide population and commerce is predicted to continue to expand. To achieve this goal, CARB is working with other state agencies to establish and implement the necessary regulatory framework to reduce GHG emissions levels to 1990 levels. And, the PDFs, other Project attributes and regulatory initiatives discussed in this section would represent a break from "business-as-usual" and support efforts to return the State to its 1990 emissions level in accordance with AB 32.

As discussed above, the Project is consistent with the GHG emission reductions adopted by the 2006 Global Warming Solutions Act (AB 32) and the 2008 Sustainable Communities and Climate Protection Act (SB 375). Therefore, the Project's contribution to the cumulative impact of global climate change would be less than significant.

5. MITIGATION MEASURES

With implementation of PDF ES 5.7-1 through PDF ES 5.7-8 and other Project attributes, combined with compliance with applicable statewide regulatory requirements, Project-level impacts with regard to GHG emissions would be less than significant;

⁴⁹ *The Governor's Office of Planning and Research has concurred with the general scientific consensus that "climate change is ultimately a cumulative impact." Governor's Office of Planning and Research, Technical Advisory—CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review, p. 6, June 19, 2008.*

See also CARB, First Update, p. 33, May 2014 ["Ultimately, climate change is affected by cumulative emissions."].

therefore, no mitigation measures would be required. Cumulative impacts with regard to GHG emissions also would be less than significant; and, thus, no mitigation measures would be required.

However, CDFW previously adopted mitigation measures to ensure implementation of the Project Applicant's design commitments that minimize impacts related to GHG emissions in connection with its adoption of the Newhall Ranch RMDP/SCP EIS/EIR. A number of the RMDP/SCP mitigation measures also apply to the Project. If the status of the RMDP/SCP EIS/EIR is unresolved or set aside in the pending litigation at the time the County considers the Project EIR certification, this EIR recommends that the County adopt the companion Entrada South (ES) measures set forth below, as applicable, to ensure implementation of the GHG-related Project design features. Those RMDP/SCP mitigation measures that are not applicable to the Project are listed in **Appendix 2B** with an explanation as to why they do not apply. Any italicized text provided in the parentheses below provides necessary updated information and/or clarifications, as needed.

In addition to the measures listed below, MMs RMDP/SCP GCC-3 through GCC-6 are applicable to the Project and would be implemented via implementation of PDFs ES 5.7-2, 5.7-3, and 5.7-8, as previously discussed.

MM ES 5.7-1/RMDP/SCP GCC-1: All residential buildings on the Project Applicant's land holdings that are facilitated by approval of the proposed Project shall be designed to provide improved insulation and ducting, low E glass, high efficiency air conditioning units, and radiant barriers in attic spaces, as needed, or equivalent to ensure that all residential buildings operate at levels 15 percent better than the standards required by the 2008 version of Title 24. Notwithstanding this measure, all residential buildings shall be designed to comply with the then-operative Title 24 standards applicable at the time building permit applications are filed. For example, if new standards are adopted that supersede the 2008 Title 24 standards, the residential buildings shall be designed to comply with those newer standards and, if necessary, exceed those standards by an increment that is equivalent to a 15-percent exceedance of the 2008 Title 24 standards. *(This mitigation measure shall be implemented through compliance with applicable regulatory standards. The Project shall currently meet the Statewide 2013 Building Efficiency Standards, formally known as Title 24, Part 6, which have superseded the 2008 Title 24 standards. However, the Title 24 standards are revisited by the CEC on a three-year cycle and are becoming increasingly efficient, particularly in light of the expressed desire of the CEC and California Air Resources Board to achieve zero net energy by 2020 for residential buildings and by 2030 for commercial buildings. Should an updated version of the*

Title 24 standards be adopted prior to the filing of building permit applications, the standards in effect at that time shall apply.)

MM ES 5.7-2/RMDP/SCP GCC-2: All commercial and public buildings on the Proposed Applicant's land holdings that are facilitated by approval of the proposed Project shall be designed to provide improved insulation and ducting, low E glass, high efficiency HVAC equipment, and energy efficient lighting design with occupancy sensors or equivalent to ensure that all commercial and public buildings operate at levels 15 percent better than the standards required by the 2008 version of Title 24. Notwithstanding this measure, all nonresidential buildings shall be designed to comply with the then-operative Title 24 standards applicable at the time building permit applications are filed. For example, if new standards are adopted that supersede the 2008 Title 24 standards, the nonresidential buildings shall be designed to comply with those newer standards and, if necessary, exceed those standards by an increment that is equivalent to a 15-percent exceedance of the 2008 Title 24 standards. *(This mitigation measure shall be implemented through compliance with applicable regulatory standards. The Project shall currently meet the Statewide 2013 Building Efficiency Standards, formally known as Title 24, Part 6, which have superseded the 2008 Title 24 standards. However, the Title 24 standards are revisited by the CEC on a three-year cycle and are becoming increasingly efficient, particularly in light of the expressed desire of the CEC and California Air Resources Board to achieve zero net energy by 2020 for residential buildings and by 2030 for commercial buildings. Should an updated version of the Title 24 standards be adopted prior to the filing of building permit applications, the standards in effect at that time shall apply.)*

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of the Project's design features and other Project attributes, and compliance with the applicable regulatory requirements, the Project's GHG impacts would be less than significant at both the Project and cumulative impact levels.