# LAND USE SERVICES DEPARTMENT
# PLANNING COMMISSION STAFF REPORT

**HEARING DATE: August 5, 2021** **AGENDA ITEM # 4**

Project Description

***Applicant:*** San Bernardino County Land Use Services Department
***Community:*** Countywide
***Location:*** Countywide
***Project No:*** PMISC-2020-00031
***Staff:*** Karen Watkins
***Proposal:*** Adoption of the San Bernardino County Greenhouse Gas Reduction Plan Update and Related Screening Tables

Newspaper Publication Date: July 26, 2021 Report Prepared By: Karen Watkins

## PROJECT DESCRIPTION

The proposal is an update to the 2011 Greenhouse Gas Reduction Plan (GHGRP), including the established goals and policies that incorporate environmental responsibility into everyday planning and management. The GHGRP provided the GHG emissions inventory for the year 2007 and target for reducing GHG emissions 15 percent below 2007 levels by 2020. San Bernardino County (County) met its 2020 GHG reduction targets. The update ensures conformity with the latest State climate change regulations and serves as a comprehensive roadmap by outlining strategies the County will implement in order to continue to achieve its GHG emissions reductions into the year 2030 and beyond. This plan is coordinated with the San Bernardino County Transportation Authority's (SBCTA) update of the County Regional Greenhouse Gases Reduction Plan, the recently adopted Countywide Plan – Policy Plan and State GHG requirements.

## BACKGROUND

State Legislation

In 2006, Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006, required a sharp reduction of greenhouse gas (GHG) emissions to transition California to a sustainable, low-carbon future. AB 32 was the first program in the country to take a comprehensive, long-term approach to addressing climate change, and does so in a way that aims to improve the environment and natural resources while maintaining a robust economy. AB 32 required California to reduce its GHG emissions to 1990 levels by 2020, which is a reduction of approximately 15% below emissions expected under a "business as usual" scenario. Senate Bill (SB) 32 provides statewide targets to reduce GHG emissions to 40 percent below 1990 levels by 2030.

Countywide Plan

The Countywide Plan was adopted on October 27, 2020. The Policy Plan component of the Countywide Plan replaced the County's General Plan. The Policy Plan set forth broad Land Use Categories to provide guidance for land use patterns and future development in the unincorporated areas of the County. Policy NR-1.7 Greenhouse gas reduction targets reads, "[w]e strive to meet the 2040 and 2050 greenhouse gas emission reduction targets in accordance with state law." In addition, the Countywide Plan documents regional roadway, transit, bicycle, and pedestrian frameworks, which affect the GHG emissions within the County.

Greenhouse Gas Reduction Plan

Consistent with the State's adopted AB 32 GHG reduction target, in 2011 the County adopted the GHGRP which set a goal to reduce emissions to 1990 levels by 2020. This target was calculated as a 15 percent decrease from 2007 levels, as recommended in the AB 32 Scoping Plan. San Bernardino County achieved this 2020 GHG reduction target that was set in the GHGRP. The proposed updated to the GHGRP presents a target for the year 2030, which is to reduce emissions to 40 percent below 2007 levels. This goal would put the County on a path toward the State's long-term goal to achieve statewide carbon neutrality (zero net emissions) by 2045.

## ANALYSIS OF PROPOSAL

Content of the GHG Reduction Plan Update (GHGRP Update)

The GHGRP Update was completed in four steps: Inventory, Forecast and Target Setting, Reduction Measures, and Implementation.

1. **Inventory (Chapter 1)** – The County's 2007 GHG emissions inventory was updated to ensure consistency in data analysis and methodologies. The 2011 GHGRP included a community inventory for the year 2007. The GHGRP Update provides a GHG emissions inventory for the year 2016.
2. **Forecast and Target Setting (Chapter 2)** – The next step was to estimate future emissions from different sectors in the County and establish GHG reduction targets. This chapter summarizes the historic and future GHG emissions, and the reduction targets the County has established.
3. **Reduction Measures (Chapter 3)** – The County has demonstrated its commitment to conserve energy and reduce emissions through a variety of programs. The measures include County-specific measures, regional measures, and state measures. This chapter details the local reduction strategies that will be implemented at the community level to meet the reduction targets identified in Chapter 2.
4. **Implementation (Chapter 4)** – In addition to adopting the GHGRP Update, there must be a commitment to implementation. The process for implementing and monitoring the identified strategies is specified in the GHGRP Update. This chapter includes specific implementation measures; potential funding sources; how the GHGRP Update will be monitored and updated over time; and summarizes the outreach and CEQA review process conducted.

Greenhouse Gases

The most common greenhouse gasses are carbon dioxide, methane, and nitrous oxide.

- **Carbon Dioxide** is the most important GHG and accounts for more than 75 percent of all GHG emissions caused by humans. It has an atmospheric lifetime of 50-200 years meaning it will stay in the atmosphere for a long time. The primary sources of carbon dioxide in the atmosphere are the burning of fossil fuels (including motor vehicles), gas flaring, cement production and land use changes (e.g., deforestation, electricity production, etc.).
- **Methane** is the main component of natural gas and is the second most abundant GHG. Agriculture accounts for the majority of methane emissions primarily from livestock and manure management. Landfills are also a small fraction of methane emissions.
- **Nitrous Oxide** is the third most abundant component of GHG. Emissions are related to agricultural soil management practices such as fertilizer application. In addition, transportation, solid waste and wastewater treatment can emit nitrous oxide.

Benefits of the GHGRP Update

The GHGRP Update addresses climate change and benefits San Bernardino County through local control of reduction strategies; energy and resource efficiencies most feasible to county sources and costs; improved public health through local air quality improvements and sustainable living practices; and demonstrating consistency with State GHG reduction goals.

Reduction Measures

Through the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), SCAG monitors transportation planning and programming activities in the region. SBCTA is engaged in the development of the RTP/SCS and coordinates with local and sub-regional input. All key features of the RTP/SCS support the County's efforts to reduce GHG emissions at the local level. Chapter 3 summarizes the proposed local reduction measures to be implemented by the County that would further reduce its community GHG emissions beyond the regional and State measures. The local measures are in the following areas: Building Energy, On-Road Transportation, Solid Waste Management, Wastewater Management, Water Conveyance, and New Development. Many local GHG reduction measures are a continuation of the County's local GHG reduction measures from the 2011 GHGRP.

The reduction strategy is organized by emission categories and includes reduction goals and measures. The goals describe the overarching objective related to reducing energy consumption. Within each goal, one or more measures are presented indicating the County's commitment toward meeting the goal. Within each measure, one or more actions are presented that indicate the steps the County will take in achieving the measure. Each measure includes the GHG reduction potential in 2030. Actions are designed to include the steps needed to implement the measure and include a performance indicator, implementation timeframe and department or agency (Land Use Services, Public Works, Community Development and Housing, etc.) responsible for implementation.

In addition, the GHGRP Update will result in local benefits while reducing GHG emissions, called co-benefits. Co-benefits range from providing improved air quality and mobility to increased awareness about sustainability. Co-benefits are identified with each measure by an icon.

Plan Implementation

Successful implementation of the GHGRP Update requires the following components:

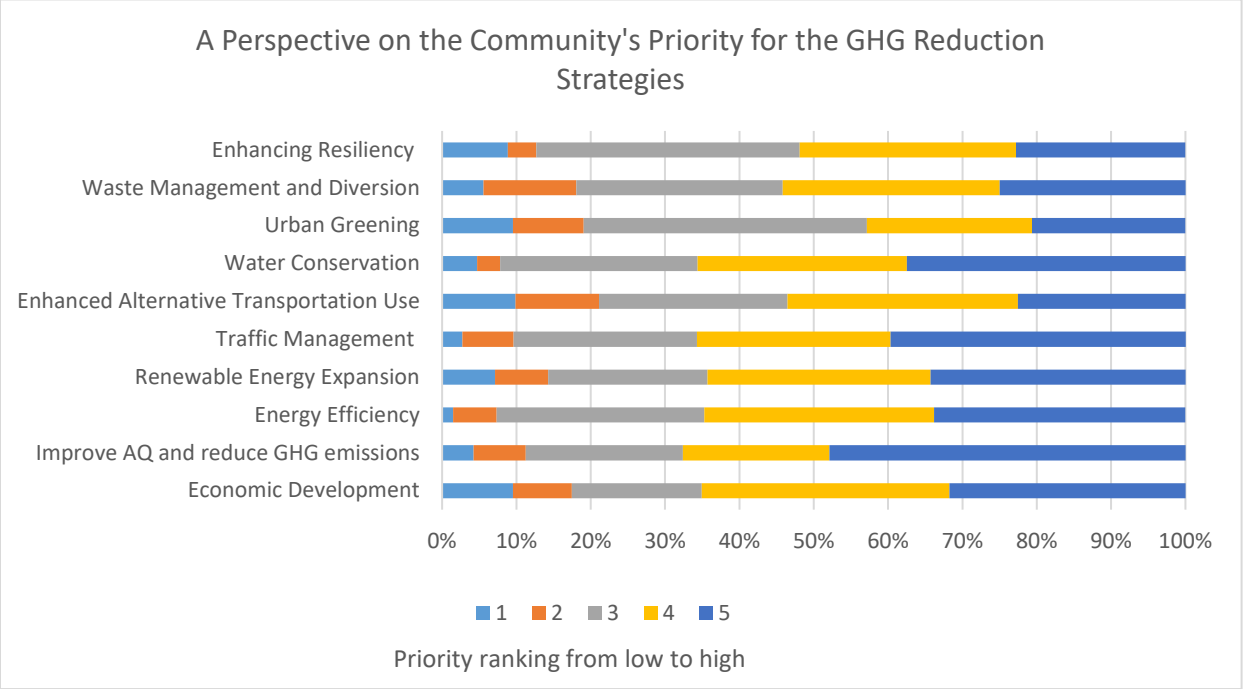
- Administration and Staffing
- Financing and Budgeting
- Timelines for Measure Implementation
- Community Outreach and Education
- Monitoring, Reporting and Adaptive Management

The steps above are basic steps that any jurisdiction might take or that other California communities have taken to implement a GHG reduction plan. These are suggested – not required – and are intended to guide the County in its implementation planning.

- **Administration and Staffing** is needed to coordinate with other regional agencies and oversee the successful implementation and tracking of all GHG reduction strategies. The goal in implementing the GHGRP Update is to leverage existing programs and staff by seeking to fold GHG planning and long-term reduction into their existing procedures, institutional organization, reporting, and long-term planning.
- **Financing and Budgeting** is needed for reduction measures requiring investment for capital improvements and increased operations and maintenance costs. In some cases, operating costs are anticipated to decrease, resulting in offset savings.
- **Timelines for Measure Implementation** includes three separate tracking tools. The first is a Screening Tables tracker tool, which is a Microsoft Excel-based spreadsheet program that can be used to track implementation of the various menu options within the screening tables. The second is a Plan Implementation Tracker Tool (PITT), which is integrated into the County's permit application tracking system to help track GHG reductions achieved through implementation of the GHG reduction measures. The third is Progress Reports to demonstrate progress towards implementation of GHG reduction strategies.
- **Community Outreach and Education** was important in preparation of the GHGRP Update and will be needed to educate various departments and the public on ways to reduce GHG emissions.
- **Monitoring, Reporting and Adaptive Management** will be supported by the three tracking tools and allow the County to make adjustments to the emission reduction measures as needed.

## COMMUNITY OUTREACH COMPLETED FOR THE GHGRP UPDATE

The County's citizens and businesses are integral to the success of the GHGRP Update and to overall GHG reduction for the region. Their involvement is essential, considering that several measures depend on the voluntary commitment, creativity, and participation of the community. A GHGRP Update survey was utilized to gather feedback from community stakeholders and residents to determine priorities and benefits for the County to focus on while updating the GHGRP. The County placed the GHGRP Update Survey on its website under the GHGRP webpage in December 2020 for the community to contribute. The survey asked a variety of questions including what GHG reduction priorities each participant would like the County to focus on while updating the GHGRP. Eighty-three (83) percent of survey respondents were residents of San Bernardino County and the remaining percentage were community stakeholders and interested parties who provided valuable feedback. The rating scale of 1 to 5 was used to rank the importance of GHG reduction strategies, as shown in the figure below. The survey highlighted that residents prioritize air quality and GHG emission reduction (48 percent), traffic management (40 percent), and water conservation and urban greening (38 percent) as high priority strategies to address climate change.




Building Industry Association – Baldy View Chapter

The County's consultant, Michael Hendrix, met with the Building Industry Association (BIA) during the first GHG Reduction Plan in 2010 and again in 2012. During the Regional GHG Reduction Plan in 2014 by SANBAG and SBCOG, the consultant met with the BIA and again during the update of the Regional Plan this year. As part of the Regional Update, the BIA submitted a letter in support. The BIA is very familiar with the County's GHG Reduction Plan and Screening Tables. They were provided a copy of the GHGRP Update before the Planning Commission hearing.

## ENVIRONMENTAL DETERMINATION

The GHGRP Update requires compliance with the California Environmental Quality Act (CEQA) prior to adoption. In 2021, the County provided CEQA review of potential environmental impacts using an Addendum to the 2011 GHGRP Supplement Program Environmental Impact Report (SPEIR). The County determined that an Addendum was appropriate based on CEQA Guidelines Section 15164(a), which states that "[t]he lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in CEQA Guidelines Section 15162 calling for preparation of a subsequent EIR have occurred." To summarize, the conditions described in CEQA Guidelines Section 15162 include changes to the project that require major revisions of the previous EIR to address new significant environmental effects or a substantial increase in the severity of previously identified environmental effects.

The GHGRP Update has not created conditions that will create new significant environmental effects or increase the severity of previously identified environmental effects. The County determined that the environmental effects resulting from the GHGRP Update would be less than those addressed in the 2011 SPEIR. This conclusion is primarily due to substantially reduced energy use, reduced emissions, and moderately less vehicle miles traveled (VMT) and noise resulting from the GHGRP Update. Because the GHGRP Update has made changes to the currently adopted GHGRP, but the changes did not create any of the conditions described in CEQA Guidelines Section 15162, an Addendum to the 2011 GHGRP SPEIR is the appropriate CEQA document.

## FINDINGS

The following findings and the evidence support the adoption of the proposed GHGRP Update, including Appendix A regarding Development Review Process Screening Tables:

1. The GHG Reduction Plan Update is consistent with the Countywide Plan – Policy Plan. The GHG Reduction Plan supports numerous Policy Plan goals, policies, and programs that contribute to the County's efforts to reduce GHG emissions and promote sustainable development. The GHGRP Update implements Policy Plan, Policy NR 1.7, regarding the County's efforts to meet the 2040 and 2050 greenhouse gas reduction targets, to the Policy Plan Natural Resources Element.
2. The GHGRP Update would not be detrimental to the public interest, health, safety, convenience, or welfare of the County, but in fact protects the environment by calling for the reduction of GHG emissions and would put the County on a path toward the State's long-term goal to achieve statewide carbon neutrality (zero net emissions) by 2045.

3. The County has evaluated the potential environmental impacts of the proposed GHGRP Update as set forth in Exhibit B. The County, acting as the Lead Agency, has determined that none of the CEQA Guidelines Section 15162 conditions apply to the GHGRP Update. An Addendum to the prior environmental documentation (GHGRP SPEIR SCH No. 2005101038) is appropriate for the proposed GHGRP Update, and an Addendum is appropriate for compliance with CEQA as described in the CEQA Guidelines. An Addendum does not need to be circulated for public review, but rather can be attached to the prior environmental documentation (CEQA Guidelines §15164(c)). Prior to initiating the GHGRP Update, the County has considered this Addendum together with the previously certified EIR (GHGRP SEIR; Exhibit C). The adoption of the Addendum reflects the independent judgment and analysis of the County.

## RECOMMENDATION

That the Planning Commission recommend that the Board of Supervisors:

1. **ADOPT** the Addendum to the San Bernardino County Greenhouse Gas Reduction Plan SPEIR (SCH No. 2005101038), and find that the Addendum has been completed in compliance with CEQA, was considered together with the SPEIR, and reflects the independent judgment and analysis of San Bernardino County;

2. **ADOPT** the Findings as contained in the Staff Report;

3. **APPROVE** the San Bernardino County Greenhouse Gas Reduction Plan Update, including Appendix A (Greenhouse Gas Emissions Development Review Process Screening Tables); and

4. **DIRECT** the Clerk of the Board to file the Notice of Determination.

## ATTACHMENTS

Exhibit A: Greenhouse Gas Reduction Plan Update
Exhibit B: Addendum to the San Bernardino Greenhouse Gas Reduction Plan Supplemental Environmental Impact Report
Exhibit C: San Bernardino Greenhouse Gas Reduction Plan Supplemental Environmental Impact Report:
http://www.sbcounty.gov/Uploads/lus/Countywide/GreenhouseGas/Full-Vol-1.pdf
http://www.sbcounty.gov/Uploads/lus/Countywide/GreenhouseGas/Full-Vol-2.pdf

# EXHIBIT A

Greenhouse Gas Reduction Plan Update

# COUNTY OF SAN BERNARDINO

# GREENHOUSE GAS REDUCTION PLAN UPDATE

June 2021

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# COUNTY OF SAN BERNARDINO

# GREENHOUSE GAS REDUCTION PLAN UPDATE

Prepared for:


Prepared by:

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LSA Project No. SBE2002

June 2021

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## Tables

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# Executive Summary

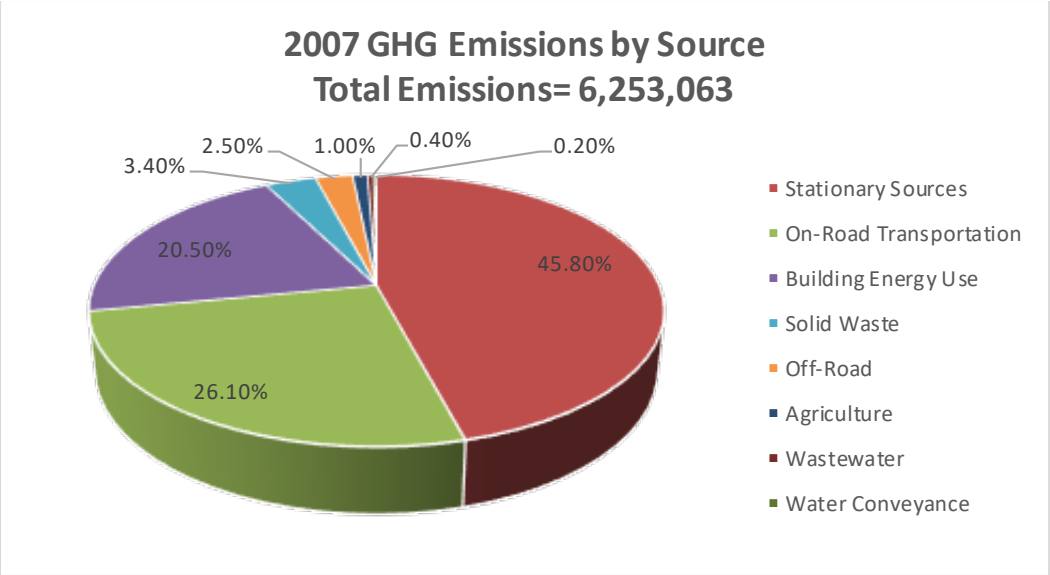
***Note Regarding Terminology:*** The 2011 San Bernardino County Greenhouse Gas Reduction Plan is herein referred to as the **GHGRP**. This document, the San Bernardino County Greenhouse Gas Reduction Plan Update, is herein referred to as the **GHGRP Update**. Finally, the San Bernardino County Regional Greenhouse Gas Reduction Plan Update, which includes the GHGRP Update along with the other 24 cities within San Bernardino County is identified herein as the **Regional Plan**.

The County of San Bernardino (County) is committed to providing a more livable, equitable, and economically vibrant community through the reduction of greenhouse gas (GHG) emissions and enhancing the community resilience with regard to vulnerabilities and risks posed by climate change. By using energy more efficiently, harnessing renewable energy to power buildings, recycling waste, and enhancing access to sustainable transportation modes, the County will keep dollars in the local economy, create jobs, and improve the community's quality of life. The efforts toward increasing the reduction of countywide GHG emissions described in this report would occur in coordination with the County's other planning and land use decisions. Through the GHGRP, the County has established goals and policies that incorporate environmental responsibility into the everyday management of its community operations. The following presents a brief summary of the steps taken to prepare this GHGRP Update.

## S.1 Inventory

The first step in completing the GHGRP Update was to update the County's GHG emissions inventory. The County completed a baseline year 2007 GHG inventory as part of the GHGRP that was adopted in 2011. For the GHGRP Update, the 2007 GHG inventory was updated to ensure consistency in data analysis and methodologies. The County emitted approximately 6,253,063 metric tons carbon dioxide equivalent (MT $CO_2$e) in 2007. The largest portion of the County's 2007 emissions was from stationary sources which are not under the jurisdictional control of the County, followed by emissions from transportation, electricity and natural gas use in buildings. For the purposes of the GHGRP Update, the County completed a 2016 emissions inventory for communitywide sectors. Figure ES-1 shows a sector level comparison of results for the 2007 and 2016 inventories. Note that the 2016 emissions inventory followed current protocols for community-wide emissions which focus on emission sources that the County has direct or indirect jurisdictional control.

The 2016 inventory indicated that the County emitted approximately 2,873,469 MT $CO_2$e. The largest portion of emissions in the 2016 inventory came from the transportation sector, which was 52.9 percent of the County's total GHG emissions. Commercial and residential energy (both electricity and natural gas) uses were the second largest contributor of GHG emissions with 33 percent of total emissions. Solid waste accounted for 7 percent and Agriculture accounted for 5 percent of total GHG emissions in 2016. Off-Road Equipment accounted for approximately 1.2 percent of total GHG emissions, and both water and wastewater-related uses emitted less than 1 percent.



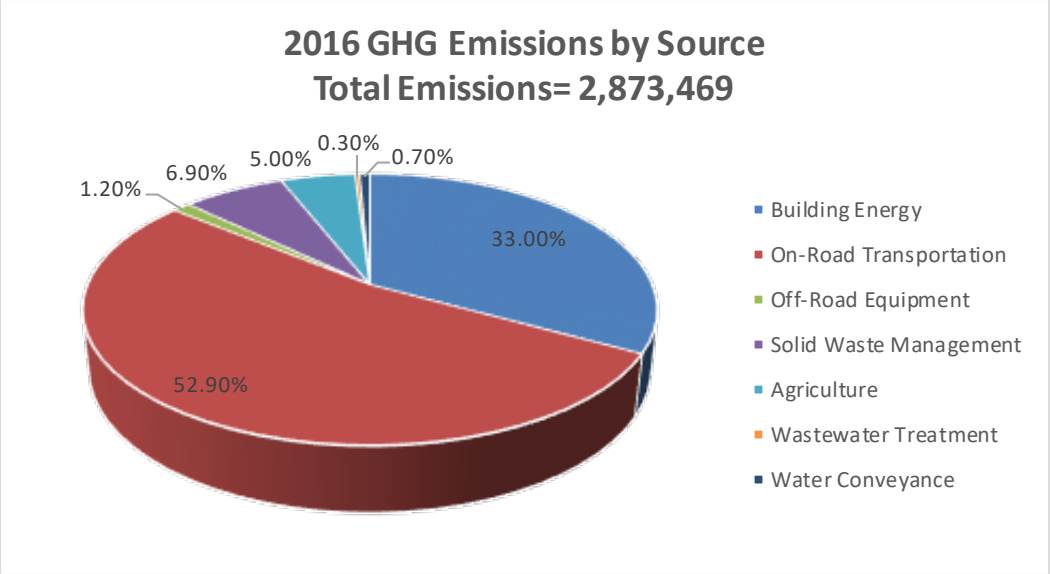




**Figure ES-1: Community GHG Emissions by Sector for Years 2007 and 2016**

## S.2 Forecast and Target Setting

The next step after conducting the 2016 GHG inventory update was to estimate future emissions from different sectors in the County and to establish GHG reduction targets.

The County's future emissions were estimated using demographic indicators, such as households and jobs growth. Growth indicators used are shown by sector in Table ES-A.

**Table ES-A: Growth Indicators for 2016, 2020 and 2030**

| Sector | Demographic Indicator | 2016 | 2020 | 2030 |
|---|---|---|---|---|
| Residential Energy | Households | 97,066 | 99,533 | 105,700 |
| Commercial/Industrial Energy | Jobs | 58,795 | 60,736 | 65,587 |
| N/A | Population | 308,079 | 313,541 | 328,897 |
| Solid Waste, Water, Wastewater, and Off-road Sources | Service Population (Population + Jobs) | 366,874 | 374,277 | 394,484 |
| Transportation | Annual VMT | 3,335,448,372 | 3,402,207,845 | 3,569,106,527 |

Source: Southern California Association of Government (SCAG) Demographic Growth Projections., San Bernardino Transportation Analysis Model (SBTAM) annual VMT.
Not applicable (NA). Population data are shown for informational purposes but are not used for forecasting any sector.
VMT = vehicle miles traveled

Future emissions estimates also included reductions that would happen with implementation of legislation adopted at the State level. That is, some level of emission reduction is anticipated within the County as a result of policies implemented at the State level, including:

- Low Carbon Fuel Standards;
- Assembly Bill (AB) 1493 and Advanced Clean Cars;
- California Building Code Title 24; and
- Renewable Portfolio Standard.

The resulting projected emissions are considered an "adjusted" business-as-usual forecast. Table ES-B and ES-C show historic Business as Usual (BAU) emissions and Adjusted BAU (ABAU) forecasts.

**Table ES-B: San Bernardino County Business as Usual (BAU) Emissions**

| Sector | 2016 (MT $CO_2e$) | 2020 (MT $CO_2e$) | Percent Change 2016–2020 | 2030 (MT $CO_2e$) | Percent Change 2016–2030 |
|---|---|---|---|---|---|
| Building Energy | 948,183 | 975,155 | 3% | 1,043,581 | 10% |
| On-Road Vehicles | 1,519,146 | 1,557,858 | 3% | 1,641,251 | 8% |
| Off-Road Equipment | 35,618 | 37,598 | 6% | 44,682 | 25% |
| Agriculture | 143,146 | 121,477 | -15% | 80,591 | -44% |
| Solid Waste Management | 197,260 | 200,758 | 2% | 210,590 | 7% |
| Wastewater Treatment | 9,651 | 9,823 | 3% | 10,304 | 7% |
| Water Transport, Distribution and Treatment | 20,465 | 20,827 | 2% | 20,960 | 2% |
| **Total** | **2,873,469** | **2,923,496** | **2%** | **3,051,959** | **6%** |

Source: Draft San Bernardino County Regional GHG Reduction Plan Update 2020
MT $CO_2e$ = metric tons carbon dioxide equivalent

**Table ES-C: San Bernardino County Adjusted Business as Usual (ABAU) Emissions**

| Sector | 2016 (MT $CO_2e$) | 2020 (MT $CO_2e$) | 2020 Percent of Total | 2030 (MT $CO_2e$) | 2030 Percent of Total |
|---|---|---|---|---|---|
| Building Energy | 948,183 | 975,155 | 33% | 604,037 | 30% |
| On-Road Vehicles | 1,519,146 | 1,557,858 | 53% | 1,131,917 | 56% |
| Off-Road Equipment | 35,618 | 37,598 | 1% | 44,682 | 2% |
| Agriculture | 143,146 | 121,477 | 4% | 80,591 | 4% |
| Solid Waste Management | 197,260 | 200,758 | 7% | 114,572 | 6% |
| Wastewater Treatment | 9,651 | 9,823 | 0% | 10,304 | 1% |
| Water Transport, Distribution and Treatment | 20,465 | 20,827 | 1% | 20,960 | 1% |
| **Total** | **2,873,469** | **2,923,496** | **100%** | **2,007,063** | **100%** |

Source: Draft San Bernardino County Regional GHG Reduction Plan Update 2019
MT $CO_2e$ = metric tons carbon dioxide equivalent

Consistent with the State's adopted AB 32 GHG reduction target, the County has set a goal to reduce emissions to 1990 levels by 2020. This target was calculated as a 15 percent decrease from 2007 levels, as recommended in the AB 32 Scoping Plan. San Bernardino County achieved this 2020 GHG reduction target that was set in the GHGRP. This GHGRP Update presents a target for the year 2030, which is to reduce emissions to 40 percent below 2007 levels, as shown in Table ES-D. This goal would put the County on a path toward the State's long-term goal to achieve statewide carbon neutrality (zero net emissions) by 2045.

**Table ES-D: Mass GHG Reduction Targets for Community Emissions**

| Strategy | Target |
|---|---|
| 2020 Target | 15% below 2007 levels |
| 2020 Emissions Goal (MT $CO_2e$) | 5,315,000 |
| 2030 Target | 40% below 2020 levels |
| 2030 Emissions Goal (MT $CO_2e$) | 1,754,098 |

Source Draft San Bernardino County Regional GHG Reduction Plan Update 2021
MT $CO_2e$ = metric tons of carbon dioxide equivalent

## S.3 Reduction Measures

The County has demonstrated its commitment to conserve energy and reduce emissions through a variety of programs and policies. In addition to State measures, the County would implement the additional local reduction measures described in this report. The local reduction measures were developed collaboratively with the 24 cities within San Bernardino County through the San Bernardino Council of Governments (SBCOG) San Bernardino County Regional GHG Reduction Plan Update (Regional Plan). The numbering of the reduction goals corresponds to the goals chosen by the County within this regional framework. The reduction goals include energy efficiency, water conservation, alternative transportation, solid waste reduction, and clean energy. Table ES-E summarizes the reductions from measures that would be implemented to meet the Community GHG reduction goals for 2030.

**Table ES-E: Summary of Community GHG Reduction Strategies and Emission Reductions**

| Local Measures | 2030 Emission Reductions (MT $CO_2e$) |
|---|---|
| **Energy** | |
| Energy Goal 1: Energy Efficiency Programs for Existing Homes and Businesses | 3,251 |
| Energy Goal 2: Weatherizing Low-Income Homes | 4,119 |
| Energy Goal 3: Energy Efficiency Retrofits for Existing Commercial/Industrial Users | 13,405 |
| Energy-Goal 7: Solar Installation on Existing Homes | 30,274 |
| Energy-Goal 8: Solar Installation on Existing Commercial/Industrial Uses | 88,198 |
| Energy Goal 10: Urban Tree Planting for Shading and Energy Savings | 27 |
| **Total:** | **139,275** |
| **On-Road Transportation** | |
| On-Road Goal 3: Transportation Demand Management and Signal Synchronization | 11,319 |
| On-Road Goal 4: Expand Bike Routes | 11,239 |
| **Total:** | **22,559** |
| **Off-Road Equipment** | |
| Off-Road Goal 2: Idling Ordinance | 457 |
| **Total:** | **457** |
| **Solid Waste Management** | |
| Waste Goal 2: Waste Diversion and Reduction | 72,474 |
| **Total:** | **72,474** |
| **Water Consumption** | |
| Water Goal 3: Water-Efficient Landscaping Practices | 2,973 |
| **Total:** | **2,973** |
| **GHG Performance Standard for New Development** | |
| DRP-1: Development Review Process Setting Standards for New Development | 16,889 |
| **TOTAL:** | **254,625** |

MT $CO_2e$ = metric tons of carbon dioxide equivalent
Wastewater-3 is implemented through the Screening Tables and is quantified under the GHG Performance Standard.
Water-2 is implemented through the Screening Tables and is quantified under the GHG Performance Standard.

## S.4 Implementation

Finally, the GHGRP in itself is not enough to meet the reduction goals without a commitment to implementation. The Implementation Chapter of the GHGRP Update identifies the process for implementing and monitoring the identified strategies. Figure ES-2 summarizes the five-step process.


**Figure ES-2: Process of Implementing the Greenhouse Gas Reduction Plan Update**

Through successful implementation of this GHGRP Update, the County will demonstrate the potential economic, social, and environmental benefits of reducing GHG emissions and providing environmental stewardship within the community.

# 1.0 Introduction

The County of San Bernardino is committed to planning sustainably for the future while ensuring a livable, equitable, and economically vibrant community. Planning sustainably includes acknowledging the local role in climate change and how the County can mitigate its greenhouse gas (GHG) emissions and prepare for (i.e., adapt to) anticipated climate-related changes. The County adopted its first Greenhouse Gas Reduction Plan (GHGRP) in September 2011. The GHGRP provided the GHG emissions inventory for the year 2007, and target for reducing GHG emissions 15 percent below 2007 levels by 2020. The County has implemented strategies to reduce its GHG emissions identified in the 2011 GHGRP, which has helped the County meet its 2020 GHG reduction targets. Since the adoption of County's GHGRP, the State has enacted new climate change regulations, most notably the Senate Bill (SB) 32, which provides statewide targets to reduce GHG emissions to 40 percent below 1990 levels by 2030. To ensure conformity with the latest State climate change regulations, the County is currently updating its 2011 GHGRP. This GHGRP Update serves as a comprehensive roadmap to outline strategies that the County will implement to continue achieving its GHG emissions reductions into the year 2030 and beyond, thereby ensuring sustainable and healthy growth.

## 1.1 Climate Change Science

Climate change is a term used to describe large-scale shifts in historically observed patterns in earth's climate system. Although the climate has historically responded to natural drivers, recent climate change has been unequivocally linked to increasing concentrations of GHGs in earth's atmosphere.

Gases that trap heat in the atmosphere are called GHGs because they transform the light of the sun into heat, similar to the glass walls of a greenhouse. Human-generated GHG emissions significantly contribute to the changes in the global climate, which have a number of physical and environmental effects. Effects associated with global climate change include sea level rise, an increase in the frequency and intensity of droughts, and increased temperature. Increased GHG emissions are largely the result of the increase in the combustion of fossil fuels.

The Intergovernmental Panel on Climate Change (IPCC)[1] assesses scientific, technical, and socioeconomic information relevant to the understanding of climate change, its potential impacts, and options for adaptation and mitigation. The IPCC identifies six key GHG compounds: carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), perfluorocarbons (PFC), sulfur hexafluoride ($SF_6$), and hydrofluorocarbons (HFC). Each GHG has a different capacity to trap heat, and therefore, GHG emissions are generally reported in metric tons (MT) of carbon dioxide equivalent ($CO_2e$). Non-$CO_2$ emissions are converted to a $CO_2e$ using each GHG's Global Warming Potential (GWP). IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of $CO_2e$, which compares the gas in question to that of the same mass of $CO_2$ ($CO_2$ has a GWP of 1 by definition). Common GHGs included in the GHGRP are $CO_2$, $CH_4$, and $N_2O$, which are the GHGs that most commonly result from human activities, and are detailed below.

[1] Intergovernmental Panel on Climate Change (IPCC) https://www.ipcc.ch/ (accessed on September 30, 2020).

**Carbon Dioxide** with a GWP of 1 is the most important anthropogenic GHG and accounts for more than 75 percent of all GHG emissions caused by humans. Its atmospheric lifetime of 50–200 years ensures that atmospheric concentrations of $CO_2$ will remain elevated for decades, even after mitigation efforts to reduce GHG concentrations are implemented. The primary sources of anthropogenic $CO_2$ in the atmosphere include the burning of fossil fuels (including motor vehicles), gas flaring, cement production, and land use changes (e.g., deforestation, oxidation of elemental carbon). Transportation, which primarily consists of on-road travel, is the single largest source of $CO_2$ in California. Electricity production, industrial, and residential sources also contribute to $CO_2$ emissions in California.[2] $CO_2$ can be removed from the atmosphere by photosynthetic organisms (e.g., plants and certain bacteria). Atmospheric $CO_2$ has increased from a preindustrial concentration of 280 parts per million (ppm) to approximately 411 ppm in 2020.[3]

**Methane ($CH_4$)**, the main component of natural gas, is the second most abundant GHG and has a GWP of 25. Agriculture accounts for the majority of methane emissions in California, resulting primarily from livestock enteric fermentation and manure management. Industrial sources and landfills are also sources of $CH_4$. Other sources contribute only a small fraction to $CH_4$ emissions including residential, transportation, electricity generation, and commercial sources.[4]Certain land uses also function as a both a source and sink for $CH_4$. For example, the primary terrestrial source of $CH_4$ is wetlands, whereas undisturbed, aerobic soils act as a $CH_4$ sink (i.e., they remove $CH_4$ from the atmosphere). Atmospheric $CH_4$ has increased from a preindustrial concentration of 715 parts per billion (ppb) to 1,873 ppb in 2020.[5]

**Nitrous Oxide ($N_2O$)** is a powerful GHG, with a GWP of 298. In the United States, more than 70 percent of $N_2O$ emissions are related to agricultural soil management practices, particularly fertilizer application. Agriculture accounts for the majority of $N_2O$ emissions, primarily from fertilizer and manure added to soil. Commercial and residential use of nitrogen fertilizer on turf and transportation (through the combustion of fossil fuels) are also major sources of $N_2O$. Industrial sources of $N_2O$ include solid waste and wastewater treatment, manufacturing, refining and other sources.[6] $N_2O$ concentrations in the atmosphere have increased nearly 21 percent, from preindustrial levels of 270 ppb to 332.9 ppb in 2020.[7]

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2 California Air Resources Board, 2016 Carbon Dioxide ($CO_2$) https://www.arb.ca.gov/cc/inventory/background/co2.htm (accessed September 30, 2020)

3 National Oceanic and Atmospheric Administration (NOAA). Annual Greenhouse Gas Index, Recent Monthly Average CO2. Website: https://www.esrl.noaa.gov/gmd/ccgg/trends/ (accessed October 23, 2020).

4 California Air Resources Board, 2016 Methane ($CH_4$) https://www.arb.ca.gov/cc/inventory/background/ch4.htm (accessed October 23, 2020)

5 NOAA, Annual Greenhouse Gas Index, Recent Monthly Mean $CH_4$. Website: https://www.esrl.noaa.gov/gmd/ccgg/trends_ch4/ (accessed October 23, 2020).

6 California Air Resources Board, 2016 Nitrous Oxide ($N_2O$) https://www.arb.ca.gov/cc/inventory/background/n2o.htm (accessed September 30, 2020)

7 NOAA, Annual Greenhouse Gas Index, Graph of $N_2O$ Concentration. Website: https://www.esrl.noaa.gov/gmd/aggi/aggi.fig2.png (accessed October 23, 2020).

## 1.2 Benefits of the GHGRP Update

This GHGRP Update, while addressing climate change, also benefits the County of San Bernardino in many direct and indirect ways.

- **Local Control:** This GHGRP Update allows the County to identify strategies to reduce resource consumption, costs, and GHG emissions in all economic sectors in a way that maintains local control over the issues and fits the character of the community. It also may position the County for funding to implement programs tied to climate goals.
- **Energy and Resource Efficiency:** This GHGRP Update identifies opportunities for the County to increase energy efficiency and lower GHG emissions in a manner that is most feasible in the community. Reducing energy consumption through increasing the efficiency of energy technologies, reducing energy use, and using alternative sustainable sources of energy are effective ways to reduce GHG emissions. Energy efficiency also provides opportunities for cost savings.
- **Improved Public Health:** Many of the GHG reduction strategies identified in this GHGRP Update also have local public health benefits. Benefits include local air quality improvements; creating a more active community through implementing sustainable living practices; and reducing health risks, such as heat stroke, elevated by climate change impacts such as increased extreme heat days.
- **Demonstrating Consistency with State GHG Reduction Goals:** The GHGRP Update may be used as GHG mitigation in the Countywide Plan, which is an update of the County's General Plan to demonstrate that the County's GHG reduction targets are aligned with State goals for reducing GHG emissions to a level less than cumulatively considerable.

## 1.3 Regulatory Setting

In an effort to stabilize GHG emissions and to reduce impacts associated with climate change, international agreements, as well as federal and State actions were implemented beginning as early as 1988. The government agencies discussed below work jointly, as well as individually, to address climate change and GHG emissions through legislation, regulations, planning, policy-making, education, and a variety of programs. The policies and regulations provide important policy drivers and context for the County's GHGRP Update.

### *1.3.1 Federal*

#### *1.3.1.1 Clean Air Act*

In 2007, through *Massachusetts v. Environmental Protection Agency* (Docket No. 05–1120), the United States Supreme Court held that the United States Environmental Protection Agency (EPA) has authority to regulate GHGs. As such, the United States Supreme Court ruled that the EPA should be required to regulate carbon dioxide and other GHGs as pollutants under Section 202(a)(1) of the Federal Clean Air Act.

## 1.3.2 State

### 1.3.2.1 California Air Resources Board Standards and Programs

The California Air Resources Board (CARB), a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and State air pollution control and climate change programs within California. In this capacity, CARB conducts research, sets State ambient air quality standards (California Ambient Air Quality Standards or CAAQS), compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial equipment.

### 1.3.2.2 Executive Order S-3-05

On June 1, 2005, California Governor Arnold Schwarzenegger announced through Executive Order S-3-05, the following GHG emissions targets:

- By 2010, California shall reduce GHG emissions to 2000 levels.
- By 2020, California shall reduce GHG emissions to 1990 levels.
- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels.

Executive Order S-3-05 also laid out responsibilities among State agencies for implementation and for reporting on progress toward the targets.

### 1.3.2.3 Executive Order B-30-15

On April 29, 2015, California Governor Jerry Brown announced through Executive Order B-30-15, the following GHG emissions target:

- By 2030, California shall reduce GHG emissions to 40 percent below 1990 levels.

The emission reduction target of 40 percent below 1990 levels by 2030 is an interim-year goal to make it possible to reach the ultimate goal of reducing emissions 80 percent under 1990 levels by 2050. The order directs the CARB to provide a plan with specific regulations to reduce statewide sources of GHG emissions. The Executive Order does not include a specific guideline for local governments.

### 1.3.2.4 Senate Bill 32

In 2016, Governor Brown signed Senate Bill (SB) 32 into law, which established a new reduction target. SB 32 codifies Executive Order B-30-15's year 2030 goal by requiring the State Board to ensure that statewide GHG emissions be reduced to 40 percent below 1990 levels by 2030. The new 2030 target places California on a trajectory toward meeting its long term-goal, which is to bring emissions down to 80 percent below 1990 levels by 2050.

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

AB 32 requires CARB to reduce statewide GHG emissions to 1990 level by 2020. As part of this legislation, CARB was required to prepare a "Scoping Plan" that demonstrates how the State will

achieve this goal. The Scoping Plan was adopted in 2011 and in it, local governments were described as "essential partners" in meeting the statewide goal, recommending a GHG reduction level 15 percent below 2005–2008 levels, depending on when a full emissions inventory is available, by 2020.

CARB released the 2017 Scoping Plan Update on January 20, 2017. The 2017 Scoping Plan Update provides strategies for achieving the 2030 target established by Executive Order B-30-15 and codified in SB 32 (40 percent below 1990 levels by 2030). The 2017 Scoping Plan Update recommends local plan level GHG emissions reduction goals. CARB recommends that local governments aim to achieve emissions of no more than 6 metric tons (MT) of $CO_2e$ per capita by 2030 and no more than 2 MT $CO_2e$ per capita by 2050.

#### 1.3.2.6 Executive Order B-55-18

On September 12, 2018, California Governor Jerry Brown announced, through Executive Order B-55-18, the following GHG emissions target:

- By 2045, California shall achieve statewide net carbon neutrality.

The emission reduction target of net carbon neutrality is a long-term goal. The order includes specific CARB actions including setting a goal of five million zero emission vehicles and doubling the reduction of carbon fuels by 2030 and developing a forest carbon plan with specific regulations to reduce statewide sources of GHG emissions toward carbon neutrality. The Executive Order does not include a specific guideline for local governments.

#### 1.3.2.7 Assembly Bill 1493, Clean Car Standards

Also known as "Pavley I," Assembly Bill (AB) 1493 standards were the nation's first GHG standards for automobiles. AB 1493 requires CARB to adopt vehicle standards that will lower GHG emissions from new light-duty autos to the maximum extent feasible. In January 2012, CARB adopted the Advanced Clean Cars Program to achieve additional GHG emission reductions for passenger vehicles for model years 2017–2025. The program includes low-emission vehicle regulations and zero-emission vehicle regulations. Together, the two standards are expected to increase average fuel economy to roughly 43 miles per gallon by 2020 (and more for years beyond 2020).

#### 1.3.2.8 Assembly Bill 341 (Commercial Recycling)

AB 341 sets a statewide goal of 75 percent recycling, composting, or source reduction of solid waste by the year 2020. As required by AB 341, the California Department of Resources Recycling and Recovery (CalRecycle) adopted the Mandatory Commercial Recycling Regulation on January 17, 2012. The regulation was approved by the Office of Administrative Law on May 7, 2012. It became effective immediately and clarifies the responsibilities in implementing mandatory commercial recycling. The Mandatory Commercial Recycling Regulation focuses on increased commercial waste diversion as a method to reduce GHG emissions. The regulation is designed to achieve a reduction in GHG emissions of 5 million MT of $CO_2$, which equates to roughly an additional 2 to 3 MT of currently disposed commercial solid waste being recycled by 2020 and thereafter.

#### 1.3.2.9 Senate Bill 97

SB 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. The legislation directed the California Office of Planning and Research to develop draft *CEQA Guidelines* "for the mitigation of GHG emissions or the effects of GHG emissions" and directed the Resources Agency to certify and adopt the *State CEQA Guidelines*. *CEQA Guidelines* Section 15183.5, Tiering and Streamlining the Analysis of GHG Emissions, was added as part of the *CEQA Guidelines* amendments that became effective in 2010 and describes the criteria needed in a GHG reduction plan that would allow for the tiering and streamlining of CEQA analysis for development projects.

#### 1.3.2.10 Executive Order S-1-07, Low Carbon Fuel Standard

California Executive Order S-01-07 mandates (1) that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020, and (2) that a low carbon fuel standard (LCFS) for transportation fuels be established in California. CARB developed the LCFS regulation pursuant to the authority under AB 32 and adopted it in 2009.

#### 1.3.2.11 Executive Order S-13-08, The Climate Adaptation and Sea Level Rise Planning Directive

Executive Order S-13-08 provides clear direction for how the State should plan for future climate impacts. Executive Order S-13-08 calls for the implementation of four key actions to reduce the vulnerability of California to climate change:

- Initiate California's first statewide Climate Adaptation Strategy that will assess the State's expected climate change impacts, identify where California is most vulnerable, and recommend climate adaptation policies.
- Request that the National Academy of Sciences establish an expert panel to report on sea level rise impacts in California in order to inform State planning and development efforts.
- Issue interim guidance to State agencies for how to plan for sea level rise in designated coastal and floodplain areas for new and existing projects.
- Initiate studies on critical infrastructure and land-use policies vulnerable to sea level rise.

#### 1.3.2.12 California Code of Regulations Title 24, Part 6

California Code of Regulations (CCR) Title 24, Part 6 (California's Energy Efficiency Standards for Residential and Nonresidential Buildings) (Title 24), was established in 1978 to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels and natural gas use result in GHG emissions and energy-efficient buildings require less electricity and natural gas. Therefore, increased energy efficiency results in decreased GHG emissions.

The California Energy Commission (CEC) adopted 2008 Standards on April 23, 2008, in response to AB 32. The Standards were adopted to provide California with an adequate, reasonably priced, and

environmentally sound supply of energy; to pursue California energy policy, which states that energy efficiency is the resource of first choice for meeting California's energy needs; to meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures into updates of State building codes every three years; and to meet the Executive Order in the Green Building Initiative to improve the energy efficiency of nonresidential buildings through aggressive standards. The latest update of CCR Title 24, Part 6 went into effect July 1, 2014, which significantly increases the energy efficiency of new residential buildings. The 2019 Title 24 standards, which became effective on January 1, 2020, are estimated to result in new buildings that use 7 percent less energy for lighting, heating, cooling, ventilation, and water heating than the previous 2016 Standards. The 2019 updates to Title 24 are focused on moving closer to zero net energy (ZNE) homes by increasing energy efficiency and requiring solar photovoltaic (PV) systems for new homes. The 2019 Title 24 standards also encourage demand responsive technologies including battery storage and heat pump water heaters and improving buildings' thermal envelopes through high performance attics, walls, and windows to improve comfort and energy savings.

#### 1.3.2.13 Senate Bill 375, Sustainable Communities Strategy

SB 375 provides for a new planning process that coordinates land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction goals established in AB 32. SB 375 requires regional transportation plans, developed by metropolitan planning organizations to incorporate a sustainable communities strategy in their regional transportation plans. The goal of the sustainable communities strategy is to reduce regional vehicle miles traveled (VMT) through land use planning and consequent transportation patterns. SB 375 also includes provisions for streamlined CEQA review for some infill projects such as transit-oriented development.

#### 1.3.2.14 CALGreen Building Code

CCR Title 24, Part 11 (California's Green Building Standard Code [CALGreen]), was adopted in 2010 and went into effect January 1, 2011. CALGreen is the first statewide mandatory green building code and significantly raises the minimum environmental standards for construction of new buildings in California. The mandatory provisions in CALGreen will reduce the use of volatile organic compound-emitting materials, will strengthen water conservation, and will require construction waste recycling.

#### 1.3.2.15 Renewable Portfolio Standard

The Renewable Portfolio Standard requires energy providers to derive 33 percent of their electricity from qualified renewable sources by 2020. In 2018, the State Legislature passed and Governor Jerry Brown signed SB 100, which requires energy providers to derive 60 percent of their electricity from qualified renewable sources by 2030, and 100 percent by 2045. The Renewable Portfolio Standard is anticipated to lower emission factors (i.e., fewer GHG emissions per kilowatt-hour used) from utilities across the State, including Southern California Edison (SCE).

#### 1.3.2.16 Senate Bill 100 California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases

SB 100 established a landmark policy requiring renewable energy and zero-carbon resources supply 100 percent of electric retail sales to end-use customers by 2045. It requires the CEC, California Public Utilities Commission (CPUC), and CARB to prepare a report.

#### 1.3.2.17 Senate Bill 379 Land Use: General Plan: Safety Element

SB 379 requires all cities and counties to include climate adaptation and resiliency strategies in the safety elements of their general plans upon the next revision beginning January 1, 2017. The bill requires the climate adaptation update to include a set of goals, policies, and objectives for their communities based on the vulnerability assessment, as well as implementation measures, including the conservation and implementation of natural infrastructure that may be used in adaptation projects. Specifically, the bill requires that upon the next revision of a general plan or local hazard mitigation plan, the safety element is to be updated as necessary to address climate adaptation and resiliency strategies applicable to the city or county.

#### 1.3.2.18 Senate Bill 350 Clean Energy and Pollution Reduction Act

SB 350 requires the State to double statewide energy efficiency savings in electricity and natural gas end uses by 2030. The CEC, working with State agencies, including the CPUC, CARB, California Independent System Operator, large utilities, and electrical corporations, is the responsible entity to implement this measure.

#### 1.3.2.19 Assembly Bill 1470 (Huffman)/Assembly Bill 797 Solar Water Heating

AB 1470 created a $25 million per year, 10-year incentive program to encourage the installation of 200,000 solar water heating systems that offset natural gas use in homes and businesses throughout the state. AB 797 extended the operation of the program through July 31, 2020, reserving 50 percent of the total program budget for the installation of solar thermal systems in low-income residential housing or in buildings in disadvantaged communities and expanding the program to homeowners that lack access to natural gas among other things.

## 1.4 County Setting

San Bernardino County is included in the Riverside-San Bernardino-Ontario metropolitan statistical area, as well as the Los Angeles–Long Beach combined statistical area. San Bernardino County is the largest county in California. The County covers approximately 20,105 square miles in Southern California. The unincorporated area of San Bernardino County has approximately 311,659 residents (SCAG 2018). The population is diverse in age. The ethnicity is approximately 45.5 percent White, 44.8 percent Hispanic, 4.2 percent African American, 2.6 percent Asian, 0.4 percent American Indian, and 2.5 percent other ethnicities. The unincorporated County has approximately 134,458, housing units, including single-family, multifamily units, mobile home, and other units.

## 1.5 Organization of the GHGRP Update

The remainder of this GHGRP Update includes four additional chapters:

- **Chapter 2.0** summarizes the County's historic and future GHG emissions and the reduction targets the County has established.
- **Chapter 3.0** details the local reduction strategies that will be implemented at the community level to meet the reduction targets identified in Chapter 2.0. Measures also include the local co-benefits of the measures.
- **Chapter 4.0** includes the implementation of the measures, potential funding sources, and how the GHGRP Update will be monitored and updated over time. It also summarizes the outreach and CEQA review process conducted as part of this GHGRP Update.
- **Chapter 5.0** comprises a list of references cited.

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# 2.0 GHG Emissions Inventory, Forecast, and Targets

## 2.1 GHG Emissions Inventory

GHG emissions inventories are the foundation of planning for future reductions. Establishing an inventory of emissions helps to identify and categorize the major sources of emissions produced over a single calendar year. A community inventory includes GHG emissions that result from the activities of the County's residents and businesses. The inventories identify the major sources of GHGs emissions caused by activities in sectors that are specific to community activities.

The 2011 GHGRP included a community inventory for the year 2007. The 2007 inventory is considered the baseline year. A baseline year is established as a starting point against which other inventories may be compared and targets may be set and is generally the earliest year with a full emissions inventory. Table A provides the sectors evaluated in the County's 2007 baseline inventory.

**Table A: Community Sectors Evaluated in the 2007 Baseline Inventory**

| Community Sectors |
|---|
| Building Energy |
| On-Road Transportation |
| Off-Road Equipment |
| Solid Waste Management |
| Agriculture |
| Wastewater Treatment |
| Water Conveyance |

### *2.1.1 2016 Greenhouse Gas Emissions Summary*

The County's 2016 GHG Inventory update, presented in Table B and Figure 1, shows the contribution of different economic sectors toward GHG emissions. The on-road transportation sector is the largest contributor to the GHG emissions (53 percent of total emissions) followed by building energy (33 percent of total emissions). The solid waste, agriculture, water, off-road transportation, and wastewater sectors contribute to the rest of the emissions.

**Table B: Communitywide GHG Emissions by Sector for 2016**

| Sector | 2016 (MT $CO_2e$) | Percent of Total |
|---|---|---|
| On-road Transportation | 1,519,146 | 53.0 |
| Off road Equipment | 35,618 | 1.2 |
| Building Energy | 948,183 | 33.0 |
| Agriculture | 143,146 | 5.0 |
| Solid Waste Management | 197,260 | 7.0 |
| Wastewater Treatment | 9,651 | 0.3 |
| Water Transport, Distribution, and Treatment | 20,465 | 0.7 |
| **Total** | **2,873,469** | 100 |

Source: Draft San Bernardino County Regional GHG Reduction Plan Update 2020
MT $CO_2e$ = metric tons of carbon dioxide equivalent

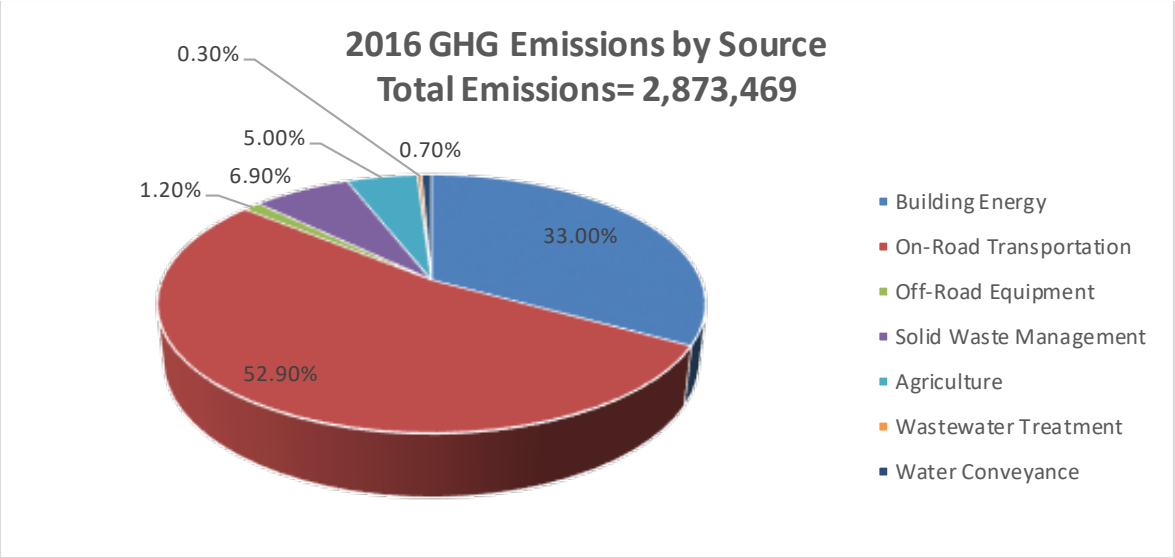
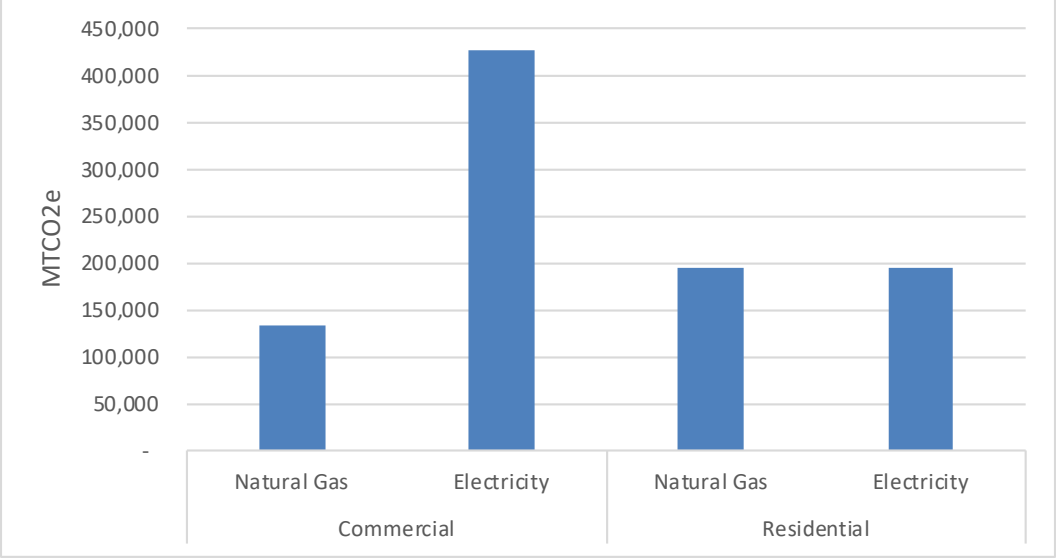



**Figure 1: Communitywide GHG Emissions by Sector For 2016**

Energy is an area over which local agencies often have the greatest opportunities for effecting change. Therefore, electricity and natural gas use remains a key area for reduction opportunities. Emissions from commercial and residential sectors energy use account for approximately 33 percent of total community emissions in 2016. Figure 2 shows the electricity and natural gas emissions from 2016 for the building energy sector. Table C includes the activity data and GHG emissions for 2016.




Source: GHG Inventory Update for San Bernardino County Regional GHG Reduction Plan Update 2020
MT $CO_2e$ = metric tons of carbon dioxide equivalent

**Figure 2: GHG Emissions for Community Electricity and Natural Gas, By Sector**

**Table C: Activity Data and GHG Emissions for Energy in 2016**

| Sector | 2016 | |
|---|---|---|
| | Activity (kWh or therms) | Emissions (MT $CO_2e$) |
| **Commercial/Industrial** | | |
| Electricity | 1,773,301,839 | 425,423 |
| Natural Gas | 24,954,644 | 132,470 |
| **Residential** | | |
| Electricity | 812,146,377 | 194,972 |
| Natural Gas | 36,002,776 | 195,318 |
| **Total** | **2,646,405,636** | **948,183** |

Source: Draft San Bernardino County Regional GHG Reduction Plan Update 2020
kWh = kilowatt hours
MT $CO_2e$ = metric tons of carbon dioxide equivalent

### 2.1.2 Inventory Forecast

Forecasting future GHG emissions allows the County to understand how emissions are expected to increase or decrease in the future. Major changes in growth or land uses may affect how to best plan to reduce emissions in the future. GHG emissions are forecast using two scenarios: a Business-as-Usual (BAU) and an Adjusted BAU (ABAU) scenario. The BAU scenario describes emissions based on projected growth in population and employment and does not consider policies that would reduce emissions in the future (that is, the policies and related efficiency levels in place in 2016 are assumed to remain constant through 2045). In general, the County is expecting modest growth to 2045 as population, housing, and jobs are all expected to increase. Table D shows the growth projections used to develop the emissions forecasts.

**Table D: Growth Indicators for 2016, 2020, 2030**

| Sector | Demographic Indicator | 2016 | 2020 | 2030 |
|---|---|---|---|---|
| Residential Energy | Households | 97,066 | 99,533 | 105,700 |
| Commercial/Industrial Energy | Jobs | 58,795 | 60,736 | 65,587 |
| N/A | Population | 308,079 | 313,541 | 328,897 |
| Solid Waste, Water, Wastewater, and Off-road Sources | Service Population (Population + Jobs) | 366,874 | 374,277 | 394,484 |
| Transportation | VMT | 3,335,448,372 | 3,402,207,845 | 3,569,106,527 |

Source: SCAG Demographic Growth Projections. 2019, SBTAM VMT forecasts
Not applicable (NA). Population data are shown for informational purposes but are not used for forecasting any sector.
VMT = vehicle miles traveled

The Adjusted BAU scenario describes emissions based on projected growth *and* considers policies that will achieve GHG reductions in the future. Policies, described in the Regulatory Setting section of Chapter 1.0, include State-adopted or approved legislation that will affect future emissions. By evaluating the two scenarios, the County can evaluate the effect that existing policies may have on future emissions and determine which local measures would provide additional reductions.

The sections below describe BAU and ABAU forecasts. Two future years are forecast for each scenario: 2020 and 2030. The 2020 and 2030 forecast years are consistent with the goals identified in AB 32, SB 32, and the corresponding Scoping Plan, which identifies statewide GHG reduction targets by 2020 and 2030.

#### 2.1.2.1 Business-as-Usual Forecasts

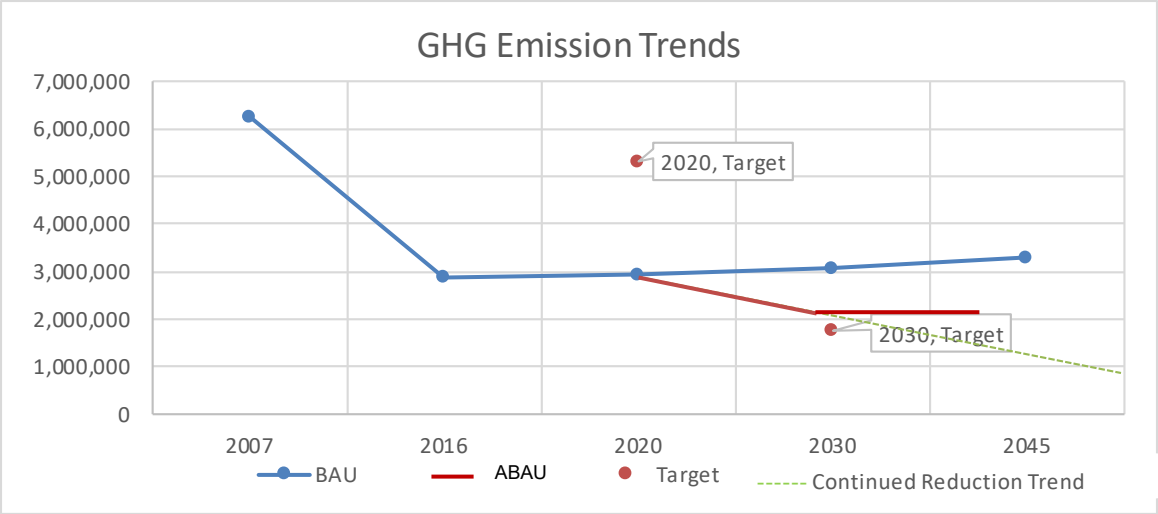
The County's BAU emissions in 2020 are estimated to be 2,923,496 MT $CO_2e$. The 2030 BAU emissions are estimated to be 3,051,959 MT $CO_2e$. Table E shows the BAU emissions for different sectors. The agriculture sector shows a decline in emissions from 2016–2030 due to decline in agricultural activities in the County over time.

**Table E: San Bernardino County Business as Usual (BAU) Forecast Emissions**

| Sector | 2016 (MT $CO_2e$) | 2020 (MT $CO_2e$) | Percent Change 2016–2020 | 2030 (MT $CO_2e$) | Percent Change 2016–2030 |
|---|---|---|---|---|---|
| Building Energy | 948,183 | 975,155 | 3% | 1,043,581 | 10% |
| On-Road Vehicles | 1,519,146 | 1,557,858 | 3% | 1,641,251 | 8% |
| Off-Road Equipment | 35,618 | 37,598 | 6% | 44,682 | 25% |
| Agriculture | 143,146 | 121,477 | -15% | 80,591 | -44% |
| Solid Waste Management | 197,260 | 200,758 | 2% | 210,590 | 7% |
| Wastewater Treatment | 9,651 | 9,823 | 3% | 10,304 | 7% |
| Water Transport, Distribution and Treatment | 20,465 | 20,827 | 2% | 20,960 | 2% |
| **Total** | **2,873,469** | **2,923,496** | **2%** | **3,051,959** | **6%** |

Source: Draft San Bernardino County Regional GHG Reduction Plan Update 2020
MT $CO_2e$ = metric tons carbon dioxide equivalent

It is important to note a downward trend in County's GHG emissions from the 2007 baseline inventory to the 2016 inventory update (Figure 3). The County's total GHG emissions in 2007 were 6,253,063 MT $CO_2e$ and in 2016 the emissions were 2,873,469 MT $CO_2e$. The blue line in Figure 3, which represents the 2007 to 2016 emissions trend and BAU forecasts, shows that there was a downward trend in GHG emissions between the years 2007 and 2016. By the year 2020, with no additional measures or strategies to reduce GHG emissions in place, BAU starts to curve up and gradually continues to go up through the year 2045. The green line in Figure 3 represents a "continued reduction trend," which indicates the continued downward trend in the County's emissions post-year 2016 that could be achieved by implementing additional GHG reduction strategies and measures identified in this GHGRP Update to limit the BAU emissions trend. This trend also emphasizes the need to implement strategies and measures to adhere to the continued reduction trend in order to help the State achieve the climate change reduction goals and also make the County of San Bernardino sustainable and healthy.




Source: GHG Inventory Update for San Bernardino County Regional GHG Reduction Plan Update 2020

**Figure 3: GHG Emissions Trends**

### 2.1.2.2 Adjusted Business-as-Usual Forecasts

The 2017 Scoping Plan Update provides the State's roadmap in achieving a statewide reduction of 40 percent below 1990 levels of emissions by 2030. Future emissions estimates within the County of San Bernardino also included reductions that would occur with implementation of the 2017 Scoping Plan Update at the State level. A great level of emission reduction is anticipated within the County as a result of the 2017 Scoping Plan Update policies and legislation implemented at the State level.

The resulting projected emissions are considered an "adjusted" business-as-usual (Adjusted BAU) forecast. The County's ABAU emissions are estimated to be 2,007,063 MT $CO_2e$ in 2030 (Figure 3). This change represents an approximately 30.2 percent reduction from 2016 by 2030. Table F shows the change in emissions from 2016 to 2030 under the ABAU scenario.

**Table F: San Bernardino County Adjusted BAU (ABAU) Forecast Emissions**

| Sector | 2016 (MT $CO_2e$) | 2020 (MT $CO_2e$) | 2020 Percent of Total | 2030 (MT $CO_2e$) | 2030 Percent of Total |
|---|---|---|---|---|---|
| Building Energy | 948,183 | 975,155 | 33% | 604,037 | 30% |
| On-Road Vehicles | 1,519,146 | 1,557,858 | 53% | 1,131,917 | 56% |
| Off-Road Equipment | 35,618 | 37,598 | 1% | 44,682 | 2% |
| Agriculture | 143,146 | 121,477 | 4% | 80,591 | 4% |
| Solid Waste Management | 197,260 | 200,758 | 7% | 114,572 | 6% |
| Wastewater Treatment | 9,651 | 9,823 | 0% | 10,304 | 1% |
| Water Transport, Distribution and Treatment | 20,465 | 20,827 | 1% | 20,960 | 1% |
| **Total** | **2,873,469** | **2,923,496** | **100%** | **2,007,063** | **100%** |

Source: Draft San Bernardino County Regional GHG Reduction Plan Update 2019
MT $CO_2e$ = metric tons carbon dioxide equivalent

### 2.1.3 Reduction Targets

The State has set goals for reducing GHG emissions by 2020, 2030, and 2045 through AB 32, SB 32, SB-100, EO-B-55-18.The State has also provided guidance to local jurisdictions as "essential partners" in achieving the State's goals by identifying a 2020 and 2030 recommended reduction goal. That goal, stated in the AB 32 Scoping Plan, was for local governments to achieve a 15 percent reduction below 2005 to 2008 levels by 2020, which aligns with the State's goal of not exceeding 1990 emissions levels by 2020. This target for San Bernardino County was calculated as a 15 percent decrease from 2008 levels by 2020.

The State passed an executive order (EO-B-55-18), which mandates statewide net carbon neutrality by 2045. In the interim, the State has also provided a target of 40 percent below 2020 levels by 2030. The County has identified this target as a 40 percent below 2020 emission levels by 2030 (Table G).

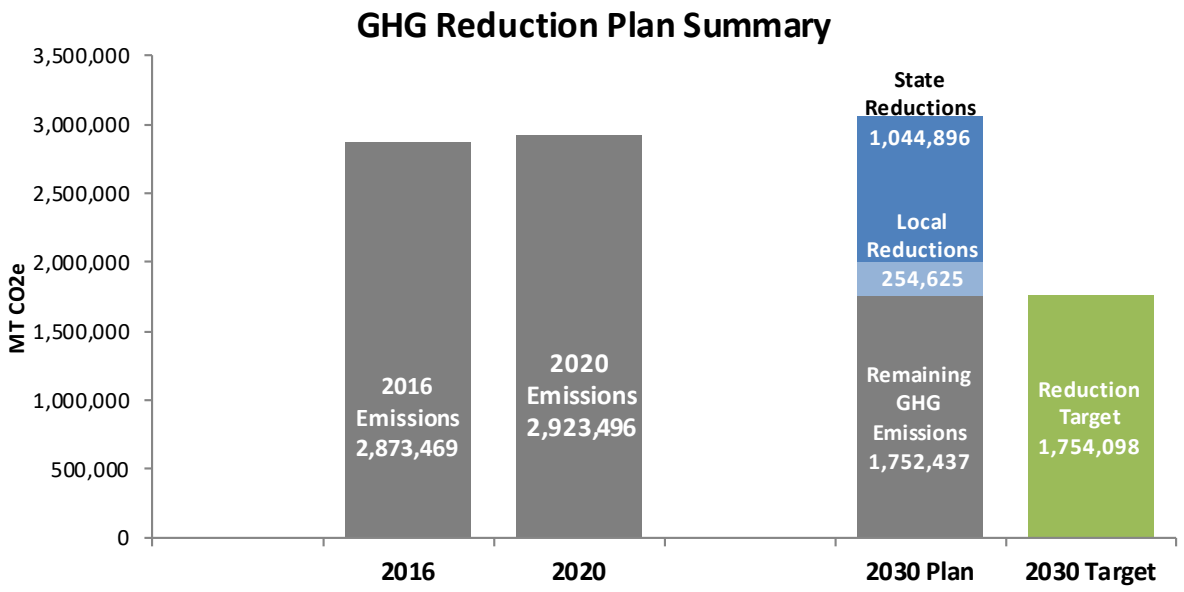
It is clear that the issue of climate change will not end in 2030 and continued reduction goals should be implemented to keep the State on a path toward the 2045 goal. The 2030 target will put the County on a path toward the State's long-term goal to achieve zero net carbon emissions by 2045.

**Table G: San Bernardino County GHG Reduction Targets for Countywide Emissions**

| Strategy | Target |
|---|---|
| 2020 Target | 15 percent below 2007 baseline levels |
| 2020 Emissions Goal (MT $CO_2e$) | 5,315,000 |
| 2030 Target | 40 percent below 2020 BAU levels |
| 2030 Emissions Goal (MT $CO_2e$) | 1,754,098 |

MT $CO_2e$ = Metric tons of carbon dioxide equivalent

As shown in Figure 4, in 2030, San Bernardino County would need to reduce its emissions to 1,754,098 MT $CO_2e$ to meet the GHG reduction target of 40 percent below 2020 levels. The County will meet and exceed the 2030 goal with State measures, as shown in Figure 4. However, the County has committed to additional local measures designed to reduce GHG emissions through its own operations; to save money over time for local building owners and managers by reducing energy use; and to support the County's healthy community efforts by improving conditions for pedestrians and cyclists.




Source: Draft San Bernardino County Regional GHG Reduction Plan Update 2021
MT $CO_2e$ = metric tons of carbon dioxide equivalent

**Figure 4: San Bernardino County Emissions Forecast Compared to the Reduction Target**

The State measures will provide significant reductions of up to 1,044,896 MT $CO_2e$ (Table H). An additional reduction of nearly 254,625 MT $CO_2e$ will be achieved through local measures as described in Chapter 3.0 of this GHGRP Update (Figure 4).

**Table H: State Measure Reductions**

| Sector | 2030 (MT $CO_2e$) |
|---|---|
| **Energy: SB 100**<br>SB 100 Obligates eligible renewable energy resources and zero-carbon resources to supply 100 percent of retails sales of electricity to California end-use customers by 2045 | 303,807 |
| **Energy: SB 350 (Clean Energy and Pollution reduction Act)**<br>SB 350 requires the state to double statewide energy efficiency savings in electricity and natural gas end uses by 2030 | 132,965 |
| **Energy: Title 24 Standards for Non-Residential and Residential Buildings**<br>Requires that building shells and building components be designed to conserve energy and water. Mandatory and voluntary measures became effective on January 1, 2020, and the guidelines are periodically updated. | 1,302 |
| **Energy: Solar Water Heater (AB 797 Solar Thermal Systems)**<br>AB 1470 created a $25 million per year, 10-year incentive program to encourage the installation of 200,000 solar water heating systems that offset natural gas use in homes and businesses throughout the state. AB 797 extended the operation of the program for two additional years to 2020, reserving 50% of the total program budget for the installation of solar thermal systems in low-income residential housing or in buildings in disadvantaged communities. | 213 |
| **Energy: Increased Combined Heat and Power (CHP)**<br>The CPUC administers a Qualifying Facilities and Combined Heat and Power Program. Qualifying facilities are co-generation (CHP) facilities that meet certain size and efficiency criteria. | 1,257 |

**Table H: State Measure Reductions**

| Sector | 2030 (MT $CO_2e$) |
|---|---|
| **On Road: Fuel Efficiency Measures.** Such as Low Carbon Fuel Standards | 509,334 |
| **Waste: SB 1383 Short-Lived Climate Pollutant (SLCP) Reduction Strategy** SB 1383 establishes a 50% statewide reduction target for organic waste by 2020, using 2014 levels as a standard. By 2025, the state aims for a 75% reduction target. | 96,018 |
| **TOTAL** | **1,044,896** |

Source: Draft San Bernardino County Regional GHG Reduction Plan Update 2020
SB= Senate Bill
MT $CO_2e$= Metric tons of carbon dioxide equivalent

# 3.0 GHG Reduction Measures

The GHGRP Update is built on a combination of State, County, and local reduction measures to achieve the County's GHG reduction goal of 40 percent below 2020 levels by 2030. This chapter details the regional and local community measures that will result in additional GHG reductions beyond those achieved by implementing State measures.

## 3.1 Existing Regional GHG Reduction Measures

The Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is the cornerstone of transportation planning and programming activities in the SCAG region. The San Bernardino County Transportation Authority (SBCTA) is actively engaged in development of the RTP/SCS through various policy and technical advisory committees maintained by SCAG, and through the coordination and preparation of local and sub-regional input to the RTP/SCS. All of the key features of the RTP/SCS support the County's efforts to reduce greenhouse gas emissions at the local level, providing the regional roadway, transit, bicycle, and pedestrian framework with which the County's local network interacts. These efforts are documented in the policies of the County's recently adopted Countywide Plan – Policy Plan, which is the updated General Plan.

This section summarizes the proposed local reduction measures to be implemented by the County that would further reduce its community GHG emissions beyond regional and State measures. The local reduction measures included in this GHGRP Update are in the following areas: Building Energy, On-Road Transportation, Solid Waste Management, Wastewater Management, Water Conveyance, and New Development. Many local GHG reduction measures described below are a continuation of the County's local GHG reduction measures from the 2011 GHGRP.

The San Bernardino County local GHG reduction strategy is organized by emission categories (energy, transportation, etc.) and includes reduction goals and measures. The reduction goals were developed collaboratively with the 24 cities within San Bernardino County through the San Bernardino Council of Governments (SBCOG) San Bernardino County Regional GHG Reduction Plan Update (Regional Plan). The numbering of the reduction goals corresponds to the goals chosen by the County within this regional framework. The goals describe the overarching objective related to reducing energy consumption, such as by reducing urban heat island effect, as well as reducing VMT and solid waste generation. Within each goal, one or more measures are presented indicating the County's commitment toward meeting the goal. Within each measure, one or more actions are presented that indicate the steps the County will take in achieving the measure. Each measure includes the GHG reduction potential in 2030. Actions are designed to include the steps needed to implement the measure. Actions include a performance indicator, implementation timeframe, and department or agency responsible for implementation. In addition, this Plan will result in local benefits while reducing GHG emissions, called co-benefits. Co-benefits range from providing improved air quality and mobility to increased awareness about sustainability. Co-benefits are identified with each measure by an icon.

County agencies, departments, and divisions included in GHG reduction measures include: Land Use Services (Planning and Building & Safety), Public Works (Transportation Infrastructure), Community Development and Housing,

| Local Co-Benefits | | |
|---|---|---|
| Increased energy efficiency/reduced demand | Water conservation | Improved public health |
| Improved air quality | Increased renewable energy | Increased non-motorized transportation |
| Sustainability education and awareness | Enhanced land use/ community design | Increased resiliency |

## 3.2 Energy

### 3.2.1 Energy Efficiency in Existing Buildings 1: Education and Outreach

Energy Goal 1: Improve the efficiency of existing buildings by focusing on increasing community awareness and education about energy efficiency; and promoting emissions reduction and existing incentive programs.

**Measure Energy-1: Increase Energy Efficiency in Existing Buildings: Outreach and Incentives**

**Co-Benefits**

| County Implementation Actions: |
|---|
| 1. Review the energy efficiency programs for existing buildings offered by SCE in the unincorporated parts of the County. |
| 2. Create outreach materials highlighting the efficiency programs that are most relevant to County residents. |
| 3. Track the energy efficiency programs to understand how they change and identify new programs. |

| County Implementation Actions: | | |
|---|---|---|
| **Target Year** | **Performance Metric** | **GHG Reduction Potential (MT $CO_2e$)** |
| 2030 | Track the building permits in the building permit systems reductions in GHGs related to existing residential permits remodels, HVAC systems change outs and re-roofing residential | 3,251 |

The State of California, Southern California Edison (SCE), and Southern California Gas Company (SCG) have a number of incentive programs that are designed, tested, and continuously improved to achieve energy savings in existing buildings. The County will promote these successful programs by distributing educational materials and information on energy efficiency programs offered by the State, utility companies, and other entities to homeowners and nonresidential owners. The information should include available incentive programs, technical assistance, and financial resources such as free energy audits and energy efficiency rebates. The programs fall into several categories, which are described below, along with examples from current offerings by relevant agencies.

| Category | Current Program Examples |
|---|---|
| **Home retrofits/Conservation (single-family)** | Home Energy Upgrade Financing program (SCE) Energy Upgrade California (SCE)<br>High Efficiency Hot Water Distribution Program (Solar) (SGC)<br>PACE Financing Program (SBCOG) |
| **Home retrofits/Conservation (multifamily)** | Energy Efficiency Benchmarking (SGC) Multifamily Direct Installation Programs (SGC) PACE Financing Program (SBCOG) |
| **Home retrofits/Conservation (mobile home)** | Comprehensive Mobile Home Program (SGC) PACE Financing Program (SBCOG) |
| **Commercial/Industrial (building retrofits/conservation)** | Energy Challenger (SCE)<br>Energy Efficient Express Solutions (SCE) Energy Efficiency Customized Solutions (SGC) Small Industrial Facility Upgrades (SGC)<br>Solar Rooftop Program (SCE) Commercial Conservation Rebates (IEUA)<br>PACE Financing Program (SBCOG) |

Sources: *CEC, SCE SGC, and IEUA* 2020
SCE = Southern California Edison
SGC = Southern California Gas Company
IEUA = Inland Empire Utilities Agency
SBCOG = San Bernardino Council of Governments

### 3.2.2 Energy Efficiency for Existing Buildings 2: Promote Energy Efficiency in Low-Income Residences

Energy Goal 2: Partner with community services agencies, utilities, nonprofits, and other entities to incentivize weatherization program for low-income residents, with a goal to weatherize 60 percent of low-income homes by 2030.

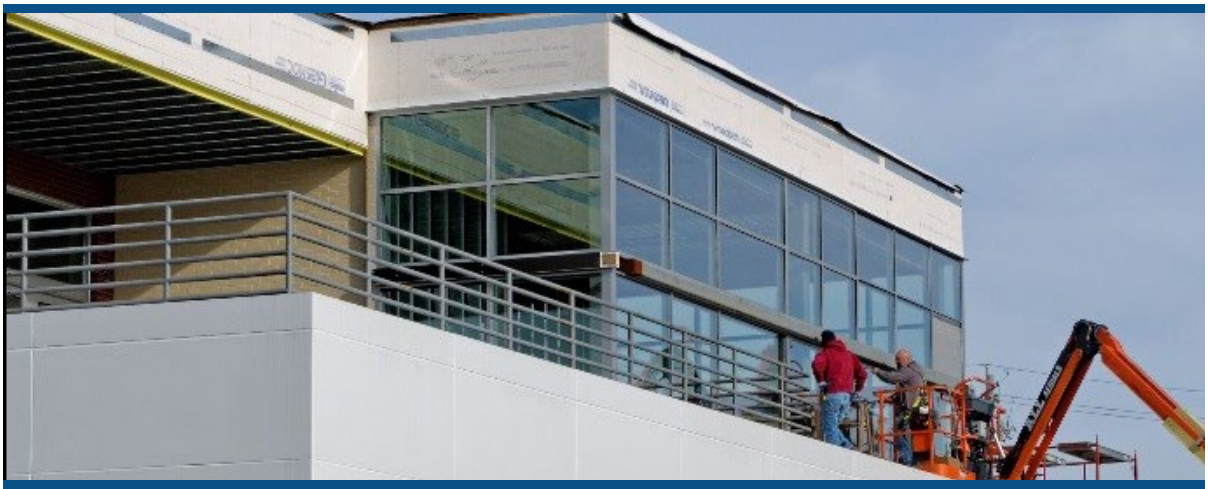
**Measure Energy-2: Promote Energy Efficiency in Low-Income Residences**

**Co-Benefits**

| **County Action:** | | |
|---|---|---|
| 1. Track the implementation of County's low-income home improvement loan and grants program. | | |
| **Target Year** | **Performance Metric** | **GHG Reduction Potential (MT $CO_2e$)** |
| 2030 | 60 percent of low-income homes weatherized for energy savings by 2030 | 4,119 |
| **Responsible Department: Development Services, Housing Division in coordination with the utility companies** | | |

### 3.2.3 Energy Efficiency for Existing Buildings 3: Promote Energy Efficiency in Non-Residential Buildings

Energy Goal 3: Incentivize energy efficiency tune-ups of existing non-residential buildings with a goal to optimize energy and water performance by identifying low- or no-cost actions related to building operations and maintenance that generate energy savings.



**Measure Energy-3: Promote Energy Efficiency Tune-Ups of Existing Commercial Units**

**Co-Benefits**

| County Action: | | |
|---|---|---|
| 1. Partner with local utility (SCE) to take advantage of energy audit programs for municipal buildings and promote awareness of these programs for private commercial buildings. | | |
| **Target Year** | **Performance Metric** | **GHG Reduction Potential (MT $CO_2e$)** |
| 2030 | 50 percent of commercial buildings participating in energy efficiency tune-ups by 2030<br>Track Commercial buildings retrofits. | 12,405 |
| **Responsible Department: Development Services, Building Division in coordination with the utility companies** | | |

### 3.2.4 Solar Energy: Local Energy 7. Solar Installations for Existing Housing

Energy Goal 7: Achieve a target of 40 percent of existing residential units (homes built prior to 2020) to incorporate solar components through the promotion of incentive programs offered by utility companies and other funding entities to be achieved by 2030.

**Measure Energy-7: Promote Installation of Solar Panels within Existing Residential Units**

**Co-Benefits**

| County Actions: | | |
|---|---|---|
| 1. Identify funding sources from State, County, and utility programs for solar energy projects.<br>2. Prepare handouts for the public, provide information on the County's website, and identify County events such as the farmer's markets, New Business Reception, job fairs, etc. where staff can distribute information. | | |
| **Target Year** | **Performance Metric** | **GHG Reduction Potential (MT $CO_2e$)** |
| 2030 | Number of solar panels installed on existing homes within unincorporated parts of San Bernardino County. | 30,274 |

| Responsible Department: Development Services, Building Division |
|---|

### 3.2.5 Solar Energy: Local Energy 8. Solar Installations for Existing Commercial/Industrial Buildings

Energy Goal 8: Achieve a target of 40 percent of existing commercial/industrial buildings (built before 2020) to incorporate solar components through the promotion of incentive programs offered by utility companies and other funding entities by 2030.

**Measure Energy-8: Promote Installation of Solar Panels within Existing Commercial/Industrial Units**

| Co-Benefits | |
|---|---|

| County Action: | | |
|---|---|---|
| 1. Identify funding sources from State, County, and utility programs for solar energy projects.<br>2. Prepare handouts for the public, provide information on the County's website, and identify County events such as farmer's markets, New Business Reception, job fairs, etc. where staff can distribute information. | | |
| **Target Year** | **Performance Metric** | **GHG Reduction Potential (MT $CO_2e$)** |
| 2030 | Number of solar panels installed on existing commercial/industrial buildings within unincorporated parts of San Bernardino County | 88,198 |
| **Responsible Department: Development Services, Building Division** | | |

### 3.2.6 Building Energy: Local Energy 10: Urban Tree Planting for Shading and Energy Savings

Energy Goal 10: Urban Tree planting would reduce energy consumption and associated GHG emissions by reducing the heat island effect. Trees and vegetation that directly shade buildings can reduce energy use by decreasing demand for air conditioning.

## Measure Energy-10: Urban Tree Planting for Shading and Energy Savings

**Co-Benefits**

| County Implementation Actions: | | |
|---|---|---|
| 1. Require new development to include trees within parking lots and streetscapes.<br>2. Require trees within median strip of roadways.<br>3. 1,000 adult shade trees planted per year.<br>4. 10 non-shade trees planted per year. | | |
| **Target Year** | **Performance Metric** | **GHG Reduction Potential (MT $CO_2e$)** |
| 2030 | Number of trees planted per year | 27 |
| **Responsible Department: Community Development in coordination with the utility companies** | | |

In addition to reducing heat island effect, the urban tree planting will contribute to enhanced carbon sequestration by increasing tree canopy cover. The County will also benefit from other opportunities for carbon sequestration. The recently adopted Countywide Plan – Policy Plan comprises policies that are geared toward preserving and enhancing natural habitats. Preserving and enhancing the County's natural habitats will also provide the additional carbon sequestration benefits as the natural habitats are GHG sinks.

A vast majority of area in the County is encompassed by desert ecosystems. Studies indicate that closed or endorheic basins in deserts are a significant storehouse of carbon (*Scientific American* 2017). Most of the growth that is expected to occur in the County will be in the Bloomington Community (located in valley in the Rialto Sphere of Influence) and Apple Valley Sphere of Influence (located in Desert, but is part of a plan adopted by Town of Apple Valley). This expected growth will not affect the pristine desert soils of the County. Therefore, the closed basins of desert in the County are expected to provide carbon sequestration benefits.

The soils in the areas of High Desert in the County that are being disturbed on a regular basis due to construction activities, will have to follow the Mojave Desert Air Quality Management District's (MDAQMD) fugitive dust control measures to minimize dust and soil disturbance during construction. The Countywide Plan – Policy Plan also includes policies to reduce disturbance to fragile desert soils

as much as practicable to reduce fugitive dust. These policies and measures will also help prevent loss of sequestration potential associated with soil disturbance.

## 3.3 On-Road Transportation

On-road transportation emissions include emissions from light- and medium-duty vehicles and heavy-duty trucks associated with land use activity. Emissions originate from the combustion of fossil fuels (such as diesel, gasoline, and compressed natural gas) to power the vehicles. These are direct emissions and accounted for approximately 53 percent of total emissions in 2016. On-road transportation measures can achieve significant benefits for both individual residents and the County as a whole. Reductions in VMT and traffic congestion would reduce smog-forming emissions, toxic air contaminants, and diesel particulate matter. Alternative modes of transportation, such as bicycling, walking, and transit, may also help reduce many serious health risks associated with vehicle exhaust. Community well-being and quality of life may also be improved as individuals spend less time commuting, waiting for the bus, and/or sitting in heavy congestion.

San Bernardino County has taken significant steps toward implementing strategies for GHG reductions in the on-road transportation sector. The County developed and implemented the Non-Motorized Transportation Plan.[8] In order to be in compliance with SB 743 and State law, the County developed the VMT threshold of significance that will generally be applied to new projects to assess potential traffic impacts to the environment under CEQA. A resolution outlining the threshold of significance and methodology to be used in the County is required in order to comply with SB 743.

### *3.3.1 On-Road Transportation: Local On-Road-3. Transportation Demand Management and Signal Synchronization*

On-Road Goal 3: Continue Implementing a Transportation Demand Management (TDM) and signal synchronization program.

[8] San Bernardino County Non-Motorized Transportation Plan. 2018. Website: https://www.gosbcta.com/wp-content/uploads/2019/10/Non-Motorized-Transportation-Plan-.pdf (Accessed October 20, 2020)

**Measure On-Road-2: Continue Implementing Transportation Demand Management (TDM) and Signal Synchronization Program Within the County**

**Co-Benefits**

| **County Actions:** | | |
|---|---|---|
| 1. Continue implementing TDM program.<br>2. County traffic engineers study all signalized intersections throughout the County and develop a signal timing optimization plan based on the Traffic Signal Control System. | | |
| **Target Year** | **Performance Metric** | **GHG Reduction Potential (MT $CO_2e$)** |
| 2030 | Number of employers participating in TDM programs.<br>Number of San Bernardino County staff members participating in TDM program.<br>VMT reductions associated with TDM programs. | 11,319 |
| **Responsible Department: Community Development and Public Works** | | |

### 3.3.2 On-Road Transportation: Local On-Road-4. Expand Bike Routes

On-Road Goal 4: Expand Bike Routes per the County's Non-Motorized Transportation Plan.

**Measure On-Road-4: Implement Non-Motorized Transportation Plan**

**Co-Benefits**

| **County Action: Construct Bike Paths** | | |
|---|---|---|
| 1. The County will implement recommended bikeway projects to improve bike transit, which would implement County's Non-Motorized Transportation Plan. | | |
| **Target Year** | **Performance Metric** | **GHG Reduction Potential ($MTCO_2e$)** |
| 2030 | Miles of new bikeway constructed or other strategies implemented based on County's Non-Motorized Transportation Plan | 11,239 |
| **Responsible Department: Community Development and Public Works** | | |

## 3.4 Off-Road Equipment

Off-road equipment accounts for 1.2 percent of total GHG emissions. These emissions are direct emissions resulting from equipment fuel combustion. Off-road equipment includes construction equipment and off-road vehicles. Typical industries that use off-road equipment include the agricultural, construction, industrial, entertainment, rail yards and dredging sectors. In addition, recreational vehicles (e.g., all-terrain vehicles), pleasure craft (e.g., jet skis), and lawn and garden equipment (e.g., mowers) are sources of off-road emissions. Reduction measures in the off-road equipment sector typically provide modest GHG reductions relative to other sectors.

Off-Road Goal 2: Idling Ordinance would change the County's current idling restriction. Currently, the County requires idling time of no more than 5 minutes for all off-road equipment fleet, per State requirements. Adopting an ordinance that limits idling time for heavy-duty diesel trucks beyond CARB or local air district, recommended idling limit is 3 minutes would help County further reduce emissions resulting from off-road equipment fleet. As part of permitting requirements or County contracts, the County could encourage contractors to submit a construction vehicle management plan that includes such things as idling time requirements; requiring hour meters on equipment; and documenting the serial number, horsepower, age, and fuel of all on-site equipment. Implementation of this measure would be a one-time action. Once the ordinance is adopted, the measure would begin to yield benefits.

**Measure Off-Road-2: Idling Ordinance**

| Co-Benefits | |
|---|---|

| County Action: |
|---|
| 1. Consider adopting an ordinance that limits idling time for heavy-duty construction equipment to 3 minutes. |
| 2. Requiring hour meters on off-road equipment. |
| 3. Documenting horsepower, age and fuel of all on-site equipment. |

| Target Year | Performance Metric | GHG Reduction Potential (MT $CO_2e$) |
|---|---|---|
| 2030 | Updates to the County off-road idling ordinance. | 457 |
| **Responsible Department: Community Development and Public Works** | | |

## 3.5 Solid Waste

Emissions from solid waste generated by the County accounted for approximately 7 percent of total emissions in 2016. The County's waste diversion programs include, but are not limited to, construction and demolition debris, green waste, single-stream recycling, white goods, electronics, household hazardous waste, tires, scrap metal, inert materials and more. The County and Waste Management will identify diversion opportunities and achieve the statewide diversion goal of 75 percent. These goals will continue to progress the County toward zero waste. CalRecycle defines zero waste as "a process and a philosophy that involves a redesign of products and consumption, so that all material goods can be reused or recycled—or not needed at all."[9]

### 3.5.1 Solid Waste: Local Waste-2. Waste Diversion and Reduction

Waste Goal 1: Exceed the waste diversion goal (50 percent) recommended by AB 939 and CALGreen by adopting countywide waste goals of at least 75 percent of waste diversion.


**Measure Waste-2: Reduce Waste at Landfills**

| Co-Benefits | |
|---|---|

| County Action: Divert at Least 75 Percent of Waste |
|---|
| 1. Require solid waste collectors to provide recycling containers for all customers in compliance with State law and facilitate waste diversion requirements mandated on all solid waste facilities. Starting in 2020, require all development during construction and demolition activities to recycle construction and demolition waste. |

[9] CalRecycle. 2017. "Zero Waste." January 26, 2020. Website: http://www.calrecycle.ca.gov/ZeroWaste/ (accessed December 18, 2017).

| Target Year | Performance Metric | GHG Reduction Potential (MT $CO_2e$) |
|---|---|---|
| 2030 | Divert 70 percent total solid waste generated in the County. | 72,474 |
| **Responsible Department: Community Development and Public Works** | | |

## 3.6 Water Consumption

### 3.6.1 Water Consumption: Local W-3. Promote Water-Efficient Landscaping Practices

Water Consumption Goal 3: The County to continue to promote water-efficient landscaping practices for homeowners, businesses, and non-residential property owners.

Image Credit: CBWCD

**Measure Water Consumption-3: Promote Water-Efficient Landscaping Practices**

**Co-Benefits**

| **County Action:** | | |
|---|---|---|
| 1. Create awareness and incentives for residents to use water-efficient landscaping practices.<br>2. Require drought-tolerant landscaping in all municipal buildings.<br>3. Promote installation of dual plumbing in all new development, allowing gray water to be used for landscape irrigation where purple pipe is not an option. | | |
| **Target Year** | **Performance Metric** | **GHG Reduction Potential (MT $CO_2e$)** |
| 2030 | Water saved through implementing drought-tolerant water-saving landscaping. | 2,973 |
| **Responsible Department: Public Works in collaboration with IEUA** | | |

## 3.7 GHG Performance Standards for New Development

### 3.7.1 GHG Performance Standards for New Development: Local DRP-1. Development Review Process Setting Standards for New Development

Goal DRP-1: Continue to Decrease GHG Emissions from New Development through Performance Standards implementing screening tables.

County planners have a unique opportunity to provide developers a flexible way of demonstrating GHG reductions within new development by providing screening tables for developers to fill out during applications of new development projects. Screening tables are a menu of options of energy efficiency improvements, renewable energy options, water conservation measures, and other options that provide predictable GHG reductions. Appendix A provides screening tables for this GHGRP Update. Each option within the screening tables includes point values based upon the GHG reduction that option would provide to a development project. Developers that choose options from the screening tables totaling 100 points or more will be determined to have provided a fair-share contribution of GHG reductions and, therefore, are considered consistent with the GHGRP Update. This determination of consistency can be used in a CEQA climate change analysis of the development, which provides a legally defensible and streamlined CEQA process for the project.

**Measure DRP-1: Development Review Process Setting Standards for New Development**

**Co-Benefits**

| **County Action:** | | |
|---|---|---|
| 1. Educate County staff, developers, etc., on how the screening tables work and advantages in using the screening tables.<br>2. Include screening tables in submittal packages for development projects and have developers select their choices of reduction measures within the screening tables to include in as a project's conditions of approval.<br>3. Establish online permitting to facilitate upgrades. | | |
| **Target Year** | **Performance Metric** | **GHG Reduction Potential (MT $CO_2e$)** |
| 2030 | Project level GHG emissions analysis to determine methods implemented for energy savings and projected GHG reductions. | 16,889 |
| **Responsible Department: Community Development** | | |

## 3.9 Summary of Reductions

Table I summarizes the strategies and the potential GHG reductions from local measures.

**Table I: Summary of Community GHG Reduction Strategies and Emission Reductions**

| Local Measures | 2030 Emission Reductions (MT $CO_2e$) |
|---|---|
| **Energy** | |
| Energy Goal 1: Energy Efficiency Programs for Existing Homes and Businesses | 3,251 |
| Energy Goal 2: Weatherizing Low-Income Homes | 4,119 |
| Energy Goal 3: Energy Efficiency Retrofits for Existing Commercial/Industrial Users | 13,405 |

**Table I: Summary of Community GHG Reduction Strategies and Emission Reductions**

| Local Measures | 2030 Emission Reductions (MT $CO_2e$) |
|---|---|
| Energy Goal 7: Solar Installation on Existing Homes | 30,274 |
| Energy Goal 8: Solar Installation on Existing Commercial/Industrial Uses | 88,198 |
| Energy Goal 10: Urban Tree Planting for Shading and Energy Savings | 27 |
| **Energy Total:** | **139,275** |
| **On-Road Transportation** | |
| On-Road Goal 3: Transportation Demand Management and Signal Synchronization | 11,319 |
| On-Road Goal 4: Expand Bike Routes | 11,239 |
| **On-Road Total:** | **22,559** |
| **Off-Road Equipment** | |
| Off-Road Goal 2: Idling Ordinance | 457 |
| **Off-Road Total:** | **457** |
| **Solid Waste Management** | |
| Waste Goal 2: Waste Diversion and Reduction | 73,380 |
| **Waste Total:** | **73,380** |
| **Water Consumption** | |
| Water Goal 3: Water-Efficient Landscaping Practices | 2,973 |
| **Water Total:** | **2,973** |
| **GHG Performance Standard for New Development** | |
| DRP-1: Development Review Process Setting Standards for New Development | 16,889 |
| **TOTAL:** | **254,625** |

MT $CO_2e$ = metric tons of carbon dioxide equivalent SB = Senate Bill
Water-2 is implemented through the Screening Tables and is quantified under the GHG Performance Standard.

## 3.10 Beyond 2030 Target

The County's emission reduction targets for the year 2030 discussed in this GHGRP Update are consistent with the goals identified in SB 32 and the corresponding Scoping Plan, which identifies statewide GHG reduction targets by 2020 and 2030. It is important to note that 2030 is only a milestone in GHG reduction planning. To be consistent with the State regulations, the County would need to look beyond 2030 and take into consideration Executive Order EO B-55-18, which calls for achieving statewide carbon neutrality by 2045. The 2030 target will keep the County on a right trajectory to meet the State of California 2045 emission goals.

As the County proceeds with implementing the measures identified above, the reduction targets may need adjustments to reflect updates in the inventory and resultant GHG emission reductions achieved through implementation of these measures from now until 2030. In future when the County would be close to meeting 2030 target pursuant to this GHGRP Update and would have a better understanding of the effectiveness and efficiency of different reduction strategies and approaches, the County would revisit the GHG reduction measures and strategies identified in the GHGRP Update.

Furthermore, the federal, State, and local programs and policies for the GHG reductions for the near term (2020–2030) are likely to be well underway and continuing technological change in the fields of energy efficiency, alternative energy generation, vehicles, fuels, methane capture and other areas will have taken place. The County will then be able to take the local, regional, State, and federal context

into account and may consider updating the GHG reduction targets post-2030. The potential new GHGRP Update will include specific strategies and measures for meeting the State mandate beyond 2030. The targets will be consistent with broader State and federal reduction targets and will take into consideration the effectiveness and applicability of the reduction measures identified in this GHGRP Update.

# 4.0 Plan Implementation

This chapter describes implementation steps for the GHGRP Update to support achievement of the energy efficiency and GHG reduction goals for the community at large. Success in meeting the County's energy efficiency and GHG emission reduction goals will depend on cooperation, innovation, and participation by the County, residents, businesses, and local government entities. This section outlines key steps that the County would follow for the implementation of this GHGRP Update.

Successful implementation of the GHGRP Update will require the following components. These are described in more detail in the sections below.

- Administration and Staffing;
- Financing and Budgeting;
- Timelines for Measure Implementation;
- Community Outreach and Education; and
- Monitoring, Reporting, and Adaptive Management.

The steps above are basic steps that any county might take or that other California communities have taken to implement a GHG reduction plan. These are suggested—not required—and are intended to guide the County in its implementation planning.

## 4.1 Administration and Staffing

The GHGRP Update's success will require coordination with other regional agencies. The County will work with these agencies and will designate staff to oversee the successful implementation and the tracking of all selected GHG reduction strategies. The County will primarily be responsible for coordinating with contacts across departments to gather data, to report on progress, to track completed projects, and to ensure that scheduling and funding of upcoming projects is discussed at key County meetings. The County may identify one or more staff to act as the Plan Implementation Administrator(s) to guide monitoring, reporting, and dissemination of information to the public.

The Administrator could have the following responsibilities:

- Secure long-term financing for the energy efficiency and GHG reduction measures (i.e., grant applications).
- Coordinate GHGRP Update implementation-related meetings.
- Serve as the external communication hub to local and regional climate action organizations, including SCAG.
- Conduct public outreach to inform the community of the County's reduction planning efforts.
- Investigate methods to use existing resources and harness community support to better streamline implementation of the Plan.

- Monitor implementation of reduction measures and success of the GHGRP Update.
- Develop a protocol for monitoring the effectiveness of emission-reduction programs.
- Establish guidelines for reporting and documenting emission-reduction progress.
- Submit annual reports to the Board of Supervisors.
- Develop a protocol for using the real-time information collected through the verification process to modify and revise existing reduction programs.
- Track State and federal legislation and its applicability to the County.

In general, the goal in implementing the GHGRP Update is not to create new administrative tasks or new staff positions necessarily, but rather to leverage existing programs and staff to the maximum extent feasible. Counties should seek to fold GHG planning and long-term reduction into their existing procedures, institutional organization, reporting, and long-term planning.

## 4.2 Financing and Budgeting

Implementation of the local GHG reduction measures may require investment for the capital improvements and other investments, and increased operations and maintenance costs. However, in some cases, operating costs are anticipated to decrease, resulting in offset savings. This section presents a summary of funding and financing options (Table J) available at the time of writing this document. The County should monitor private and public funding sources for new grant and rebate opportunities and to better understand how larger agencies are accessing funds that can be used for GHG reductions in their areas. Leveraging financing sources is one of the most important roles a local government can play in helping the community to implement many of the GHG reduction measures.

**Table J: Potential Funding Sources to Support GHG Reduction Measures**

| Funding Source | Description |
|---|---|
| **State and Federal Funds** | |
| Federal Tax Credits for Energy Efficiency | ■ Tax credits for energy efficiency can be promoted to residents. |
| Energy Efficient Mortgages (EEM) | ■ An EEM is a mortgage that credits a home's energy efficiency in the mortgage itself.<br>■ Residents can finance energy-saving measures as part of a single mortgage.<br>■ To verify a home's energy efficiency, an EEM typically requires a home energy rating of the house by a home energy rater before financing is approved.<br>■ EEMs are typically used to purchase a new home that is already energy efficient, such as an ENERGY STAR®-qualified home. |
| California Department of Resources Recycling and Recovery (CalRecycle) | ■ CalRecycle grant programs allow jurisdictions to assist public and private entities in management of waste streams.<br>■ Incorporated cities and counties in California are eligible for funds.<br>■ Program funds are intended to:<br>○ Reduce, reuse, and recycle all waste<br>○ Encourage development of recycled-content products and markets<br>○ Protect public health and safety and foster environmental sustainability |

**Table J: Potential Funding Sources to Support GHG Reduction Measures**

| Funding Source | Description |
|---|---|
| California Energy Commission (CEC) | ■ CEC has energy efficiency financing options for projects with proven energy savings. These options include 0% interest rate loans for K–12 school districts, county offices of education, State special schools, community colleges, and 1% interest rate loans for cities, counties, special districts, public colleges or universities, public care institutions/ public hospitals, University of California campuses, and California State University campuses.<br>■ Projects eligible for the CEC energy efficiency financing low interest loans include:<br>○ Lighting system upgrades<br>○ Pumps and motors<br>○ Streetlights and light-emitting diode (LED) traffic signals<br>○ Building insulation<br>○ Heating, ventilation, and air conditioning equipment<br>○ Water and wastewater treatment equipment |
| California Air Resources Board (CARB) | ■ CARB offers several grants, incentives, and credits programs to reduce on-road and off-road transportation emissions. Residents, businesses, and fleet operators can receive funds or incentives depending on the program.<br>■ The following programs can be utilized to fund local measures:<br>○ Air Quality Improvement Program (Assembly Bill 118)<br>○ Carl Moyer Program – Voucher Incentive Program<br>○ Goods Movement Emission Reduction Program (Proposition 1B Incentives)<br>○ Loan Incentives Program<br>○ Lower-Emission School Bus Program/School Bus Retrofit and Replacement Account (Proposition 1B and United States Environmental Protection Agency Incentives) |
| Existing Capital Improvement Program | ■ State and federal funds would most likely continue to local governments, builders, and homeowners in the following forms:<br>○ Grants<br>○ Transportation and transit funding<br>○ Tax credit and rebate programs<br>○ The Capital Improvement Program can be used for measures relating to traffic or transit. |
| State Funding for Infrastructure | ■ The State's Infill Infrastructure Grant Program may potentially be used to help fund measures that promote infill housing development.<br>■ Grants can be used for gap funding for infrastructure improvements necessary for specific residential or mixed-use infill development projects. |
| Transportation-Related Federal and State Funding | ■ For funding measures related to transit, bicycle, or pedestrian improvements, the following funding sources from SCAG may be used.<br>○ Sustainability Planning Grant<br>○ California Active Transportation Program<br>■ Caltrans Transportation Planning Grant Program provides funding that would lead to programming and implementation of transportation improvement projects.<br>○ Sustainable Communities Grants<br>○ Strategic Partnerships Grants<br>○ Adaptation Planning Grants |

## Table J: Potential Funding Sources to Support GHG Reduction Measures

| Funding Source | Description |
|---|---|
| Utility Rebates | ■ Department of Water and Power offers a variety of residential and commercial rebate programs:<br>○ Residential and Commercial Turf Replacement Program<br>○ Pool/Spa Cover Rebates<br>○ Rebates for Water-Efficient Devices<br>○ Recirculating Pump Rebate<br>○ Free Urinal Flush Valve Upgrades and Installation<br>■ Southern California Edison is one of the utilities participating in the California Solar Initiative.<br>■ A variety of rebates are available for existing and new homes.<br>■ Photovoltaics, thermal technologies, and solar hot water projects are eligible.<br>■ Single-family homes, commercial development, and affordable housing are eligible. |
| Energy Upgrade California | ■ The program is intended for home energy upgrades.<br>■ Funding comes from the American Recovery and Reinvestment Act, California utility ratepayers, and private contributions.<br>■ Utilities administer the program, offering homeowners the choice of one of two upgrade packages—basic or advanced.<br>■ Homeowners are connected to home energy professionals.<br>■ Rebates, incentives, and financing are available.<br>■ Homeowners can receive money back on an upgrade through the local utility. |
| **Private Funding** | |
| Private Funding | ■ Private equity can be used to finance energy improvements, with returns realized as future cost savings.<br>■ Rent increases can fund retrofits in commercial buildings.<br>■ Net energy cost savings can fund retrofits in households.<br>■ Power Purchase Agreements involve a private company that purchases, installs, and maintains a renewable energy technology through a contract that typically lasts 15 years. After 15 years, the company would uninstall the technology or sign a new contract.<br>■ On-Bill Financing (OBF) can be promoted to businesses for energy-efficiency retrofits. OBF funding is a no-interest loan that is paid back through monthly utility bills. Lighting, refrigeration, HVAC, and LED streetlights are all eligible projects. |
| **Other Funding Mechanisms for Implementation** | |
| Other Funding | ■ Increased operating costs can be supported by grants from the Strategic Growth Council or the State Department of Conservation to fund sustainable community planning, natural resource conservation and development, and adoption. |
| **Future Funding Options: Funding Mechanisms for Capital and/or Implementation Costs** | |
| New Development Impact Fees | ■ These types of fees may have some potential to provide funding, but such fees are best implemented when the real estate market and overall regional economic conditions are strong. |
| General Obligation Bond | ■ A general obligation bond is a form of long-term borrowing and could be used to fund municipal improvements. |

**Table J: Potential Funding Sources to Support GHG Reduction Measures**

| Funding Source | Description |
|---|---|
| Assembly Bill (AB) 811 Districts Property-Assessed Clean Energy (PACE) | ■ AB 811 is intended to help municipalities accomplish the goals outlined in AB 32.<br>■ The PACE finance program is intended to finance energy and water improvements within a home or business through a land-secured loan, and funds are repaid through property assessments.<br>■ Municipalities are authorized to designate areas where property owners can enter into contractual assessments to receive long-term, low-interest loans for energy and water efficiency improvements, and renewable energy installation on their property.<br>■ Financing is repaid through property tax bills.<br>■ AB 811 and the PACE program are currently on hold for residential properties due to potential violation of standard Federal Housing Finance Agency federally guaranteed (Fannie Mae/Freddie Mac) residential mortgage contracts.<br>■ The SBCTA has implemented the Home Energy Renovation Opportunity (HERO; a PACE program) in San Bernardino County to assist residents in financing residential energy efficiency and solar retrofits. |

HVAC = heating, ventilation, and air conditioning
SCAG = Southern California Association of Governments

In addition to pursuing the funding options above and monitoring the availability of others, the County should take the following steps to best inform decisions related to the cost of GHG reduction measures:

- **Perform and Refine Cost Estimates.** Cost estimates for local reduction measures should be performed to identify the cost-effectiveness of each measure to inform and to guide the implementation process. This analysis will likely be based on a variety of participation, per-unit, and other assumptions. As programs are developed, cost estimates should be refined and updated over time with more precise implementation-level data.
- **Integrate GHG Reduction into Existing County Budget and Capital Improvements Program.** Certain capital improvements may need to be added to the Capital Improvements Program (CIP) and facility master plan programs, as well as those of the County utility enterprises and other public agencies that have control for project implementation. For CIPs completely under the County's control, new projects would need to be assessed for consistency with the GHGRP Update.
- **Adopt or Update Ordinances and/or Codes:** Some local reduction measures may require new or revised ordinances. Staff would need to coordinate these efforts in conjunction with planning departments, planning commissions, and Board of Supervisors.
- **Pursue Outside Funding Sources:** A range of funding from State and federal agencies has been identified. The County would need to pursue these (and other emerging) funding sources as a part of implementation efforts.
- **Implement and Direct Preferred County Funding Sources:** While County funding sources are limited, the County , when financially able, as a part of its budget process, could appropriate funding from general sources or make changes in its fee schedules, utility rates, and other sources as needed to support funding the implementation of the GHG reduction measures.

- **Create Monitoring/Tracking Processes:** Local reduction measures would require program development, tracking, and/or monitoring.
- **Identify Economic Indicators to Consider Future Funding Options:** Economic recovery may occur rapidly or slowly. Whatever the timeframe, the County would need to determine the point at which certain additional funding sources may become feasible and/or favorable. Identification and monitoring of economic indicators and trends, such as home prices, energy prices, cost per kWh on solar installations, unemployment rates, or real wage increases, can help the County decide when to further explore the potential for funding local reduction measures through different financing mechanisms.

## 4.3 Community Outreach, Education and CEQA Review

#### *4.3.1.1 Community Outreach and Education*

The County's citizens and businesses are integral to the success of the GHGRP Update and to overall GHG reduction for the region. Their involvement is essential, considering that several measures depend on the voluntary commitment, creativity, and participation of the community. A GHGRP Update survey was utilized to gather feedback from community stakeholders and residents in order to determine priorities and benefits for the County to focus on while updating the GHGRP. The County placed the GHGRP Update Survey on its website under the GHGRP webpage for the community to contribute. The survey asked a variety of questions including what GHG reduction priorities each participant would like the County to focus on while updating the GHGRP. Eighty-three (83) percent of survey respondents were residents of San Bernardino County and the remaining percentage were community stakeholders and interested parties who provided valuable feedback. The rating scale of 1 to 5 was used to rank the importance of GHG reduction strategies, as shown in Figure 5. The survey highlighted that residents prioritize air quality and GHG emission reduction (48 percent), traffic management (40 percent), water conservation and urban greening (38 percent) as high priority strategies to address climate change.

It is important for the County to have a plan that is consistent with the character of the community and take into account the community's needs. There will be a continuous effort to ensure the GHGRP Update will take the community's needs into account now and in the future. Moving forward, the County would educate stakeholders, such as businesses, business groups, residents, developers, and property owners about the GHG reduction measures that require their participation, encourage participation in these programs, and alert them to program requirements, incentives and/or rebate availability, depending on the measure. The County staff would schedule periodic meetings to facilitate formal community involvement in GHGRP Update implementation and adaptation over time. This could include focused meetings for a specific measure or program such as the PACE program and/or agenda items at Council or other public meetings. These meetings would be targeted to particular stakeholder groups and provide information on GHGRP Update implementation progress as well as the implementation of a specific program or new policy. Alternatively, periodic written updates could be provided in County newsletters, SCAG's newsletter, on County websites, or through other media communications with the general public, such as press releases and public service announcements. Stakeholders would be provided an opportunity to comment on potential improvements or changes to the GHGRP Update. The County would also sponsor periodic outreach

events to directly inform and solicit the input, suggestions, and participation of the community at large.

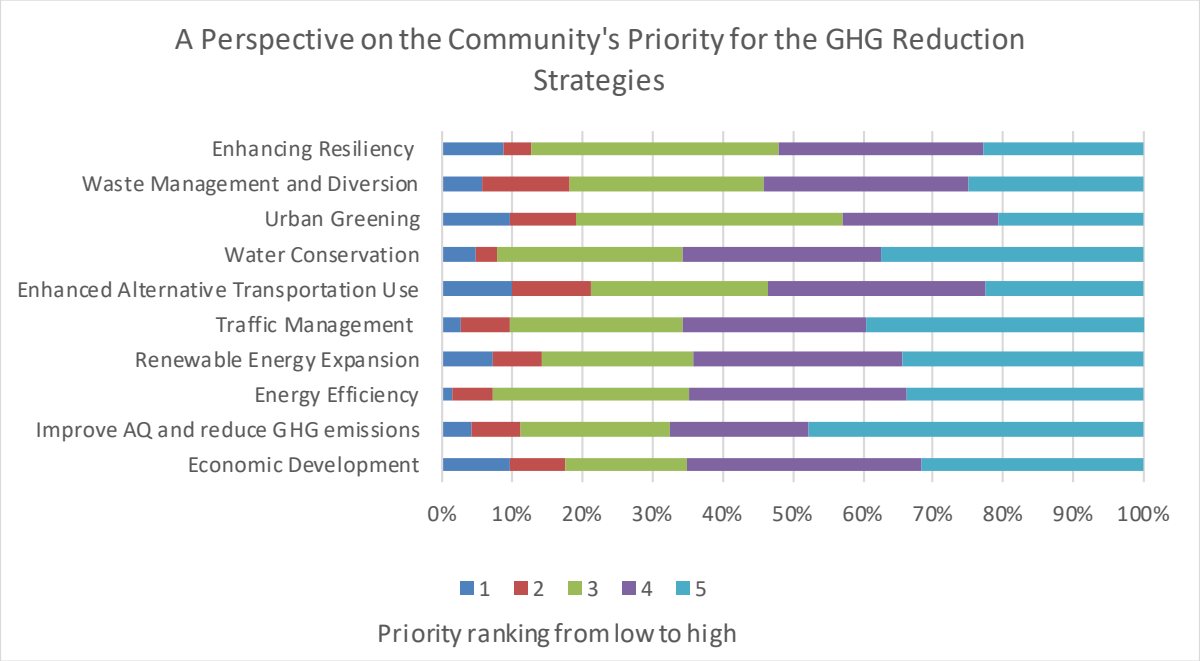



**Figure 5: GHGRP Update Survey: County community's priorities for GHG reduction strategies**

#### *4.3.1.2 California Environmental Quality Act (CEQA) Review*

The GHGRP Update requires compliance with CEQA prior to adoption. In 2021, the County provided CEQA review of potential environmental impacts using an Addendum to the 2011 GHGRP Supplement Program Environmental Impact Report (SEIR). The County determined that an Addendum was appropriate based on *CEQA Guidelines* Section 15164(a), which states that "The lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in *CEQA Guidelines* Section 15162 calling for preparation of a subsequent EIR have occurred." To summarize, the conditions described in *CEQA Guidelines* Section 15162 include changes to the project that require major revisions of the previous EIR to address new significant environmental effects or a substantial increase in the severity of previously identified environmental effects. The GHGRP Update has not created conditions that will create new significant environmental effects or increase the severity of previously identified environmental effects. The County determined that the environmental effects resulting from the GHGRP Update would be less than those addressed in the 2011 SEIR. This conclusion is primarily due to substantially reduced energy use, reduced emissions, and moderately less VMT and noise resulting from the GHGRP Update. Because the GHGRP Update has made changes to the currently adopted GHGRP, but the changes did not create any of the conditions described in *CEQA Guidelines* Section 15162, an Addendum to the 2011 GHGRP SEIR is the appropriate CEQA document.

## 4.4 Monitoring, Reporting, and Adaptive Management

Regular monitoring is important to ensure programs function as they were originally intended. Early identification of effective strategies and potential issues would enable the County to make informed decisions on future priorities, funding, and scheduling. Moreover, monitoring provides concrete data to document the County's progress in reducing GHG emissions. The County would be responsible for developing a protocol for monitoring the effectiveness of emission reduction programs as well as for undertaking emission inventory updates:

- **Update GHG Inventory:** The County would update inventory emissions prior to 2030 to ensure it meets its GHG reduction goals. This includes regular data collection in each of the primary inventory sectors (utility, regional VMT, waste, wastewater, and water), and comparing the inventory to the County's baseline GHG emissions in 2007. The County would consolidate information in a database or spreadsheet that could be used to evaluate the effectiveness of individual reduction measures.
- **Track State Progress:** The GHGRP Update will rely heavily on State-level measures. The County would be responsible for tracking the State's progress on implementing State-level programs. Close monitoring of the real gains being achieved by State programs would allow the County to adjust the GHGRP Update, if needed.
- **Track Completion of GHG Reduction Measures:** The GHGRP would keep track of measures implemented as scheduled in the GHGRP Update, including progress reports on each measure, funding, and savings. This will allow at least a rough attribution of gains when combined with regular GHG inventory updates.
- **Regular Progress Reports:** The County may report annually (or semi-annually or at other assigned intervals) to the Board of Supervisors on GHGRP Update implementation progress. If annual reports, periodic inventories, or other information indicates that the GHG reduction measures are not as effective as originally anticipated, the GHGRP Update may need to be adjusted, amended, or supplemented.

## 4.5 Tracking Tools

### *4.5.1 Screening Tables*

The purpose of the screening tables is to provide a measurable way of determining if a development project is implementing the GHG Performance Standard and is able to quantify the reduction of emissions attributable to certain design and construction measures incorporated into development projects. The screening table assigns points for each option incorporated into a project as mitigation or a project design feature (collectively referred to as "feature"). The point values correspond to the minimum emission reduction expected from each feature. The menu of features allows maximum flexibility and options for how development projects can implement the GHG Performance Standard. Projects that earn enough points would be consistent with the reductions anticipated in the GHGRP Update.

The County would use a Screening Tables tracker tool, which is a Microsoft Excel-based spreadsheet program that can be used to track implementation of the various menu options within the screening

tables. This spreadsheet would allow the County to track cumulative points garnered by projects and to predict emission reductions. These values of reductions can then be input into the GHG Performance Standard within the Plan Implementation Tracker Tool (PITT) described in more detail below.

### 4.5.2 Plan Implementation Tracker Tool (PITT)

The County's Permit Implementation Tracker Tool (PITT) is integrated into the County's permit application tracking system that will help the County track GHG reductions achieved through implementation of the GHG reduction measures within the GHGRP Update, to monitor the plan's implementation progress, and to share findings with stakeholders, partners, and the community. Through the PITT the County will be able to automatically derive estimates for annual GHG reductions achieved by State, County, and local reduction measures to track progress toward meeting the County's GHG reduction targets.

### 4.5.3 Progress Reports

The GHGRP Update will be tracked continuously through the County's permitting software. The County will use this automated tracking system to report progress toward the GHGRP Update goals. Metrics would be established for all measures to track implementation progress more specifically. The sector specific GHG reduction summaries could be prepared and used by the county staff to demonstrate progress towards implementation of GHG reduction strategies.

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# APPENDIX A:

# SCREENING TABLES

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# County of San Bernardino

# GREENHOUSE GAS EMISSIONS

## Development Review Process Screening Tables

February 2021

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# ATTACHMENTS

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# Introduction

The County of San Bernardino (County) adopted its current Greenhouse Gas (GHG) Emissions Reduction Plan in 2011. The GHG Emissions Reduction Plan provided baseline greenhouse gas (GHG) emissions inventory for the year 2008, and targets to reduce the County's GHG emissions to 15 percent below baseline emissions by 2020. This was roughly equivalent to the Scoping Plan adopted by the State of California in 2008 that recommended a target of 15 percent below 'current' (2005-2008) levels by the year 2020. LSA updated the County's GHG inventory for year 2016, which demonstrated that the County achieved the 2020 reduction target in that year. Since the adoption of the County's GHG Emissions Reduction Plan, the State has enacted new climate change regulations, most notably Senate Bill (SB) 32, which stipulates statewide targets to reduce GHG emissions to 40 percent below 1990 levels by 2030. The State has also published the 2017 Climate Change Scoping Plan (the Scoping Plan), which provides a framework on how the State will achieve the goals of SB 32. The County has determined that reducing GHG emissions within the unincorporated County area 40 percent below the 2016 levels of emissions by 2030 matches the State goal outlined in SB 32 and complements the Statewide efforts outlined in the Scoping Plan. To ensure conformity with the latest State climate change regulations and 2017 Scoping Plan, the County's GHG Emissions Reduction Plan is currently being updated.

Reductions related to transportation, water, solid waste, energy, and renewable energy sources all play a crucial part in gaining the level of efficiency needed within new development across the County. Mitigation of GHG emissions impacts through the Development Review Process (DRP) provides one of the most substantial reduction strategies for reducing communitywide GHG emissions associated with new development.

The County's forthcoming GHG Emissions Reduction Plan Update includes the Performance Standard that will reduce 7,891 Metric Tons of Carbon Dioxide Equivalents (MT $CO_2e$) per year from new development by 2030 as compared to the 2030 business as usual (BAU) scenario. The DRP procedures for evaluating GHG impacts and determining significance for CEQA purposes will be streamlined by utilizing (1) applying a uniform set of performance standards to all development projects, and (2) utilizing the Interim Screening Tables to mitigate project GHG emissions. Projects will have the option of preparing a project-specific technical analysis to quantify and mitigate GHG emissions. A review standard of 3,000 $MTCO_2e$ per year will be used to identify projects that require the use of the Interim Screening Tables or a project-specific technical analysis to quantify and mitigate project emissions. The review standard of 3,000 $MTCO_2e$ per year and the performance standard are described in Attachment 1, and the Screening Tables & methodology are described in Attachment 2, the methodology for determining unmitigated and mitigated emission is described in Attachment 3.

The County is proposing to extend its 2011 GHG Emissions Reduction Plan through 2020, at which time its Update is expected be completed. In the interim, the County shall utilize the Interim screening tables developed as part of the forthcoming GHG Emissions Reduction Plan Update and edit it to become the

Interim screening tables for use by the County during the interim period starting in 2020 and extending until adoption of the GHG Emissions Reduction Plan Update. The interim screening tables will continue to provide GHG reductions from new development during the interim period. The levels of GHG reductions designed into the Interim screening tables are consistent with the State goal of achieving 40 percent below 1990 levels of emissions by 2030.

The California Environmental Quality Act (CEQA) requires the assessment of environmental impacts for proposed projects including the impacts of GHG emissions. The purpose of this document is to provide guidance on how to analyze GHG emissions and determine the significance of those emissions during CEQA review of proposed development projects within the County. The analysis, methodology, and significance determination (thresholds) are based upon the forthcoming GHG Emissions Reduction Plan Update. The Performance Standards and Screening Tables can be used by the County for review of development projects in order to ensure that the specific reduction strategies in the forthcoming GHG Emissions Reduction Plan Update are implemented as part of the CEQA process for development projects. The Screening Tables provide a menu of options that ensures both implementation of the reduction strategies and flexibility on how development projects would implement the reduction strategies to achieve an overall reduction of emissions, consistent with the reduction targets of the forthcoming GHG Emissions Reduction Plan Update.

# California Environmental Quality Act

## CEQA Mandates for Analysis of Impacts

CEQA requires that Lead Agencies inform decision-makers and the public regarding the following: potential significant environmental effects of proposed projects; feasible ways that environmental damage can be avoided or reduced through the use of feasible mitigation measures and/or project alternatives; and the reasons why the Lead Agency approved a project if significant environmental effects are involved (*CEQA Guidelines* § 15002). CEQA also requires Lead Agencies to evaluate potential environmental effects based to the fullest extent possible on scientific and factual data (*CEQA Guidelines* § 15064[b]). A determination of whether or not a particular environmental impact would be significant shall be based on substantial evidence, which includes facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts (*CEQA Guidelines* § 15064f[5]).

The amended *CEQA Guidelines* § 15064.4[a] [b] explicitly require Lead Agencies to evaluate GHG emissions during CEQA review of potential environmental impacts generated by a proposed project. To assist in this effort, two questions were added to Appendix G of the *CEQA Guidelines*:

- Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

- Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

Finally, under the "rule of reason," an Environmental Impact Report (EIR) is required to evaluate impacts to the extent that is reasonably feasible (*CEQA Guidelines* § 15151; *San Francisco Ecology Center v. City and County of San Francisco* [1975] 48 Cal.App.3rd 584). While CEQA does require Lead Agencies to make a good faith effort to disclose what they reasonably can, CEQA does not demand what is not realistically possible (*Residents at Hawks Stadium Committee v. Board of Trustees* [1979] 89 Cal.App.3rd 274, 286).

# Greenhouse Gas Impact Determination

## Statewide or Regional Thresholds of Significance

There are currently no published statewide thresholds of significance for measuring the impact of GHG emissions generated by a proposed project. *CEQA Guidelines* § 15064.7 indicates only that "each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects." South Coast Air Quality Management District (SCAQMD) has published draft thresholds that, when finalized, jurisdictions within the SCAQMD boundary can use if they do not have their own thresholds and GHG mitigation plans. However, the forthcoming GHG Reduction Plan Update for the County addresses cumulative GHG emissions, has reduction targets that reduce the cumulative GHG impacts to less than significant, has a set of reduction measures that achieves the reduction targets, and provides an implementation plan to implement the reduction measures. This document provides guidance in how to address GHG emissions in CEQA analysis and determine the significance of project-generated GHG emissions.

## Quantitative Analysis Relative to the GHG Reduction Plan

### METHODOLOGY OVERVIEW

An individual project cannot generate enough GHG emissions to influence global climate change. The project participates in climate change by its incremental contribution combined with the cumulative increase of all other sources of GHGs, which when taken together may have a significant impact on global climate change (AEP 2007). To address the State's requirement to reduce GHG emissions, the County is preparing the GHG Reduction Plan Update with targets of reducing GHG emissions within the County by 40 percent below the 2016 emission levels by 2030. The County's target is consistent with SB 32 and ensures that the County is providing GHG reductions locally that will complement State and international efforts of stabilizing climate change.

Because the County's forthcoming GHG Reduction Plan Update addresses GHG emissions reduction, in concert with SB 32, and international efforts to address global climate change, and includes specific local

requirements that would substantially lessen the cumulative problem, compliance with the forthcoming GHG Reduction Plan Update would fulfill the description of mitigation found in *CEQA Guidelines* § 15130(a)(3) and § 15183.5.

GHG emissions are only important in the context of cumulative emissions; therefore, the focus of the analysis is on answering the question of whether incremental contributions of GHGs are a cumulatively considerable contribution to climate change impacts. The forthcoming GHG Reduction Plan Update includes a set of reduction measures designed to substantially lessen cumulative impacts associated with GHG emissions as described in *CEQA Guidelines* § 15130(a)(3), in determining if a project's effects would result in significant impacts. The forthcoming GHG Reduction Plan Update has the following components that fulfill cumulative mitigation for GHG emissions:

1. Provides a communitywide GHG emissions reduction target that would substantially lessen the cumulative impact;
2. Provides measures that new development projects shall follow to meet the County's reduction target and substantially lessen the cumulative impact;
3. Provides a set of GHG emission inventories that provide quantitative facts and analysis for how the measures within the GHG Reduction Plan Update meet the reduction targets that substantially lessen the cumulative impact; and
4. Provides an implementation, monitoring, and update program to ensure that the reduction target is met.

The forthcoming GHG Reduction Plan Update satisfies the first condition by adopting targets of reducing GHG emissions within the County 40 percent below 2016 levels of emissions by 2030. The 2030 reduction target is compliant with SB 32.

The forthcoming GHG Reduction Plan Update satisfies the second condition through the implementation of the reduction measures for new development. This document supplies the specific criteria that new development shall follow to ensure that the reduction measures associated with new development are implemented and the reduction targets are met.

The forthcoming GHG Reduction Plan Update satisfies the third criterion by providing a set of communitywide GHG emissions inventories for existing conditions (2008 baseline) and future 2030 and 2045 GHG emissions that are anticipated without the reduction measures (Adjusted Business-As-Usual, or ABAU). The GHG Reduction Plan Update also demonstrates reduced levels of 2030 and 2045 GHG emissions that demonstrate how the implementation of reduction measures achieves the reduction targets. These communitywide GHG emission inventories are found in Appendix A of the forthcoming GHG Reduction Plan Update.

## The Development Review Process

Integrating the reduction measures of the forthcoming GHG Reduction Plan Update into the CEQA development review process is the first step in determining how a proposed project will implement the GHG reduction measures within the forthcoming GHG Reduction Plan Update. The GHG emissions development review process is predicated on responses to two questions:

- **Question 1:** Is the proposed activity a "Project" as defined by CEQA? If the activity is not a project under CEQA, no further action is required concerning GHG emissions in the development review process.
- **Question 2:** Is the project exempt under CEQA? If so, then the California Air Resources Board has determined that GHG emissions are less than significant and no additional GHG reductions are needed. *CEQA Guidelines* § 15300 through § 15332 list the CEQA exemptions.

Appendix A of this document contains a flow chart that diagrams this development review process.

There are also exemption opportunities associated with transit-oriented development (TOD) associated with the Sustainable Communities Strategy (SCS) for the region developed by the Southern California Association of Governments (SCAG) and first introduced in the 2012 Regional Transportation Plan (RTP). Exemptions associated with TOD are divided into two categories: transit priority projects (TPP) and Sustainable Community Projects (SCP). Appendix B of this document provides the TPP and SCP Checklist to assist project applicants in determining if a project qualifies for these exemptions under CEQA. If the project does not qualify for a CEQA exemption, then the applicant needs to incorporate GHG reductions and implement the County GHG Plan i using a uniform set of performance standards applied to development projects. These performance standards are part of the County Development Code to ensure consistent application during development review. The complete Development Review Process, including the use of performance standards, for assessing and mitigating GHG emissions is outlined below.

a) County Performance Standards. All development projects, including those otherwise determined to be exempt from CEQA will be subject to applicable Development Code provisions, including the GHG performance standards, and state requirements, such as the California Building Code requirements for energy efficiency. With the application of the GHG performance standards, projects that are exempt from CEQA and small projects that do not exceed 3,000 $MTCO_2e$ PER YEAR will be considered to be consistent with the Plan and determined to have a less than significant individual and cumulative impact for GHG emissions. (See Attachment 1 hereto, for description of the performance standards and the methodology relating to the 3,000 $MTCO_2e$ per year level)

b) Regulatory Agency Performance Standards. When, and if, South Coast Air Quality Management District or Mojave Basin Air Quality Management District adopts standards, the County will consider such guidance and incorporate all applicable standards.

c) Projects Using Screening Table. For projects exceeding 3,000 $MTCO_2e$ per year of GHG emissions, the County will use Screening Tables as a tool to assist with calculating GHG reduction measures and the determination of a significance finding. Projects that garner a 100 or greater points would not require quantification of project specific GHG emissions. The point system was devised to ensure to Project compliance with the reduction measures in the GHG Plan such that the GHG emissions from new development, when considered together with those existing development, will allow the County to meet its 2020 target and support reductions in GHG emissions beyond 2020. Consistent with the CEQA Guidelines, such projects are consistent with the Plan and therefore will be determined to have a less than significant individual and cumulative impact for GHG emissions. (See Attachment 2 hereto, for a full description of the Screening Tables and methodology.)

d) Projects Not Using Screening Tables. Projects exceeding 3,000 MTY of GHG emissions that do not use the Screening Tables, will be required to quantify project-specific GHG emissions and achieve the equivalent level of GHG emissions efficiency as a 100-point project. Consistent with the CEQA Guidelines, such projects are consistent with the Plan and therefore will be determined to have a less than significant individual and cumulative impact for GHG emissions. (See below for a description of this alternative GHG mitigation analysis and methodology.)

e) Residential Projects Located Outside City Sphere of Influence. Residential Projects (or mixed use projects with a residential component) in excess of 250 residential dwelling units that are located in unincorporated area not within a City Sphere of Influence (SOI) will not be eligible to use the Screening Tables or rely on the Plan for a determination of less than significant on individual or cumulative impact for GHG emissions. These projects must perform an independent project-specific evaluation of GHG emissions as described in Attachments 1 and 3 hereto, and present project-specific conclusions regarding significance of GHG emissions impacts. (As part of the implementation of the County GHG Plan, a uniform set of performance standards will be applied to development projects. These performance standards will be added to the County Development Code to ensure consistent application during development review.

# ALTNERATIVE METHODS FOR THE CALCULATION OF GHG EMISSIONS

Analysis of development projects can either be done through emissions calculations or by using the Screening Tables as described below.

Total GHG emissions are the sum of emissions from both direct and indirect sources. Direct sources include mobile sources, such as construction equipment, motor vehicles, and landscape equipment, and stationary sources, such as cooling and heating equipment. Indirect sources comprise electrical and potable water use, and the generation of solid waste and wastewater.

Direct GHG emissions from mobile and stationary sources are determined as the sum of the annual GHG emissions from construction equipment, motor vehicles, landscape equipment, and heating and cooling equipment.

Indirect sources are determined based on source as follows. Electrical usage is reported as annual emissions from electrical usage. Potable water usage is reported as the annual emissions from electricity used for potable water treatment and transportation. Solid waste is reported as the sum of annual emissions from solid waste disposal treatment, transportation, and fugitive emissions of methane at the solid waste facilities. Wastewater usage is reported as the annual emissions from wastewater transport and treatment.

Analysis of development projects not using the Screening Tables should use the emission factors found in the latest version of the California Climate Action Registry (CCAR) General Reporting Protocol (CCAR, January 2009), and guidance in the Association of Environmental Professionals' (AEP) *White Paper: Community-Wide Greenhouse Gas Emission Inventory Protocols* (AEP, June 2011). Quantification of emissions from electricity used for potable water treatment and transportation as well as wastewater transport and treatment can be found in the California Energy Commission (CEC) document titled *Refining Estimates of Water-Related Energy Use in California* (CEC 2006).

# ATTACHMENT 1:

PERFORMANCE STANDARDS

PROJECTS EMITTING 3,000 MT $CO_2E$ OR LESS PER YEAR

RESIDENTIAL PROJECTS OUTSIDE THE SPHERES OF INFLUENCE

# PERFORMANCE STANDARDS

The GHG reducing performance standards were developed by the County to improve the energy efficiency, water conservation, vehicle trip reduction potential, and other GHG reducing impacts from all new development approved within the unincorporated portions of San Bernardino County. As such, the following Performance Standards establish the minimum level of compliance that development must meet to assist in meeting the 2030 GHG reduction target identified in the in the County GHG Emissions Reduction Plan. These Performance Standards apply to all Projects, including those that are exempt under CEQA, and will be included as Conditions of Approval for development projects.

The following are the Performance Standards (Conditions of Approval) used for Industrial, Commercial and Residential projects in the County:

## COMMERCIAL AND INDUSTRIAL PROJECTS

1. *GHG – Operational Standards. The developer shall implement the following as greenhouse gas (GHG) mitigation during the operation of the approved project:*

   *a) Waste Stream Reduction. The "developer" shall provide to all tenants and project employees County-approved informational materials about methods and need to reduce the solid waste stream and listing available recycling services.*

   *b)* Vehicle Trip Reduction. The "developer" shall provide to all tenants and project employees County-approved informational materials about the need to reduce vehicle trips and the program elements this project is implementing. Such elements may include: participation in established ride-sharing programs, creating a new ride-share employee vanpool, designating preferred parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading for ride sharing vehicles with benches in waiting areas, and/or providing a web site or message board for coordinating rides.

   *c)* Provide Educational Materials. The developer shall provide to all tenants and staff education materials and other publicity about reducing waste and available recycling services. The education and publicity materials/program shall be submitted to County Planning for review and approval. The developer shall also provide to all tenants and require that the tenants shall display in their stores current transit route information for the project area in a visible and convenient location for employees and customers. The specific transit routes displayed shall include Omni Trans Route 8, San Bernardino-Mentone-Yucaipa.

*d)* Landscape Equipment. The developer shall require in the landscape maintenance contract and/or in onsite procedures that a minimum of 20% of the landscape maintenance equipment shall be electric-powered.

2. *GHG – Construction Standards. The "developer" shall submit for review and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce GHG emissions and submitting documentation of compliance. The developer/construction contractors shall do the following:*
   *a) Implement the approved Coating Restriction Plans.*
   *b) Select construction equipment based on low GHG emissions factors and high-energy efficiency. All diesel/gasoline-powered construction equipment shall be replaced, where possible, with equivalent electric or CNG equipment.*
   *c) Grading contractor shall provide the implement the following when possible:*
      1) training operators to use equipment more efficiently.
      2) identifying the proper size equipment for a task can also provide fuel savings and associated reductions in GHG emissions
      3) replacing older, less fuel-efficient equipment with newer models
      *4)* use GPS for grading to maximize efficiency
   *d) Grading plans shall include the following statements:*
      - *"All construction equipment engines shall be properly tuned and maintained in accordance with the manufacturers specifications prior to arriving on site and throughout construction duration."*
      - *"All construction equipment (including electric generators) shall be shut off by work crews when not in use and shall not idle for more than 5 minutes."*
   e) *Schedule construction traffic ingress/egress to not interfere with peak-hour traffic and to minimize traffic obstructions. Queuing of trucks on and off site shall be firmly discouraged and not scheduled. A flagperson shall be retained to maintain efficient traffic flow and safety adjacent to existing roadways.*
   *f) Recycle and reuse construction and demolition waste (e.g. soil, vegetation, concrete, lumber, metal, and cardboard) per County Solid Waste procedures.*
   *g) The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew and educate all construction workers about the required waste reduction and the availability of recycling services.*

3. *GHG – Design Standards. The developer shall submit for review and obtain approval from County Planning that the following measures have been incorporated into the design of*

*the project. These are intended to reduce potential project greenhouse gas (GHGs) emissions. Proper installation of the approved design features and equipment shall be confirmed by County Building and Safety prior to final inspection of each structure.*

a) *Meet Title 24 Energy Efficiency requirements implemented January 1, 2020. The Developer shall document that the design of the proposed structures meets the current Title 24 energy-efficiency requirements. County Planning shall coordinate this review with the County Building and Safety. Any combination of the following design features may be used to fulfill this requirement, provided that the total increase in efficiency meets or exceeds the cumulative goal (100%+ of Title 24) for the entire project (Title 24, Part 6 of the California Code of Regulations; Energy Efficiency Standards for Residential and Non Residential Buildings, as amended February 14, 2019; Cool Roof Coatings performance standards as amended February 14, 2019):*
   - *Incorporate dual paned or other energy efficient windows,*
   - *Incorporate energy efficient space heating and cooling equipment,*
   - *Incorporate energy efficient light fixtures, photocells, and motion detectors,*
   - *Incorporate energy efficient appliances,*
   - *Incorporate energy efficient domestic hot water systems,*
   - *Incorporate solar panels into the electrical system,*
   - *Incorporate cool roofs/light colored roofing,*
   - *Incorporate other measures that will increase energy efficiency.*
   - *Increase insulation to reduce heat transfer and thermal bridging.*
   - *Limit air leakage throughout the structure and within the heating and cooling distribution system to minimize energy consumption.*

b) *Plumbing. All plumbing shall incorporate the following:*
   - *All showerheads, lavatory faucets, and sink faucets shall comply with the California Energy Conservation flow rate standards.*
   - *Low flush toilets shall be installed where applicable as specified in California State Health and Safety Code Section 17921.3.*
   - *All hot water piping and storage tanks shall be insulated. Energy efficient boilers shall be used.*

c) *Lighting. Lighting design for building interiors shall support the use of:*
   - *Compact fluorescent light bulbs or equivalently efficient lighting.*
   - *Natural day lighting through site orientation and the use of reflected light.*
   - *Skylight/roof window systems.*

- *Light colored building materials and finishes shall be used to reflect natural and artificial light with greater efficiency and less glare.*
- *A multi-zone programmable dimming system shall be used to control lighting to maximize the energy efficiency of lighting requirements at various times of the day.*
- *Provide a minimum of 2.5 percent of the project's electricity needs by on-site solar panels.*

d) *Building Design. Building design and construction shall incorporate the following elements:*

- *Orient building locations to best utilize natural cooling/heating with respect to the sun and prevailing winds/natural convection to take advantage of shade, day lighting and natural cooling opportunities.*
- *Utilize natural, low maintenance building materials that do not require finishes and regular maintenance.*
- *Roofing materials shall have a solar reflectance index of 78 or greater.*
- *All supply duct work shall be sealed and leak-tested. Oval or round ducts shall be used for at least 75 percent of the supply duct work, excluding risers.*
- *Energy Star or equivalent appliances shall be installed.*
- *A building automation system including outdoor temperature/humidity sensors will control public area heating, vent, and air conditioning units*

e) *Landscaping. The developer shall submit for review and obtain approval from County Planning of landscape and irrigation plans that are designed to include drought tolerant and smog tolerant trees, shrubs, and groundcover to ensure the long-term viability and to conserve water and energy. The landscape plans shall include shade trees around main buildings, particularly along southern and western elevations, where practical.*

f) *Irrigation. The developer shall submit irrigation plans that are designed, so that all common area irrigation areas shall be capable of being operated by a computerized irrigation system, which includes either an on-site weather station, ET gauge or ET-based controller capable of reading current weather data and making automatic adjustments to independent run times for each irrigation valve based on changes in temperature, solar radiation, relative humidity, rain and wind. In addition, the computerized irrigation system shall be equipped with flow sensing capabilities, thus automatically shutting down the irrigation system in the event of a mainline break or broken head. These features will assist in conserving water, eliminating the potential*

*of slope failure due to mainline breaks and eliminating over-watering and flooding due to pipe and/or head breaks.*

g) *Recycling. Exterior storage areas for recyclables and green waste shall be provided. Where recycling pickup is available, adequate recycling containers shall be located in public areas. Construction and operation waste shall be collected for reuse and recycling.*

h) *Transportation Demand Management (TDM) Program. The project shall include adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. Preferred carpool/vanpool spaces shall be provided and, if available, mass transit facilities shall be provided (e.g. bus stop bench/shelter). The developer shall demonstrate that the TDM program has been instituted for the project or that the buildings will join an existing program located within a quarter mile radius from the project site* that provides a cumulative 20% reduction in unmitigated employee commute trips*. The TDM Program shall publish ride-sharing information for ride-sharing vehicles and provide a website or message board for coordinating rides. The Program shall ensure that appropriate bus route information is placed in each building.*

4. *GHG – Installation/Implementation Standards. The developer shall submit for review and obtain approval from County Planning of evidence that all applicable GHG performance standards have been installed, implemented properly and that specified performance objectives are being met to the satisfaction of County Planning and County Building and Safety. These installations/ procedures include the following:*

   a) *Design features and/or equipment that cumulatively increases the overall compliance of the project to exceed Title 24 minimum standards by five percent.*

   b) *All interior building lighting shall support the use of fluorescent light bulbs or equivalent energy-efficient lighting.*

   c) *Installation of both the identified mandatory and optional design features or equipment that have been constructed and incorporated into the facility/structure.*

## RESIDENTIAL PROJECTS

1. *GHG – Operational Standards. The developer shall implement the following as greenhouse gas (GHG) mitigation during the operation of the approved project:*

   a. *Waste stream reduction. The* "developer" shall provide to all tenants and project employees County-approved informational materials about methods and need to reduce the solid waste stream and listing available recycling services.

*b.* Vehicle Trip Reduction. The "developer" shall provide to all tenants and homeowners County-approved informational materials about the need to reduce vehicle trips and the program elements this project is implementing. Such elements may include: participation in established ride-sharing programs, creating a new ride-share employee vanpool, and/or providing a web site or message board for coordinating rides.

c) Provide Educational Materials. The developer shall provide to all tenants and employees education materials and about reducing waste and available recycling services. The education materials shall be submitted to County Planning for review and approval.

d) Landscape Equipment. The developer shall require in the landscape maintenance contract and/or in onsite procedures that a minimum of 20% of the landscape maintenance equipment shall be electric-powered.

2. *GHG – Construction Standards. The developer shall submit for review and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce impacts to GHG and submitting documentation of compliance. The developer/construction contractors shall do the following:*

   *a) Implement both the approved Coating Restriction Plans.*

   *b) Select construction equipment based on low-emissions factors and high-energy efficiency. All diesel/gasoline-powered construction equipment shall be replaced, where possible, with equivalent electric or CNG equipment.*

   *c) Grading plans shall include the following statements:*

   - *"All construction equipment engines shall be properly tuned and maintained in accordance with the manufacturers specifications prior to arriving on site and throughout construction duration."*
   - *"All construction equipment (including electric generators) shall be shut off by work crews when not in use and shall not idle for more than 5 minutes."*

   d) *Schedule construction traffic ingress/egress to not interfere with peak-hour traffic and to minimize traffic obstructions. Queuing of trucks on and off site shall be firmly discouraged and not scheduled. A flagperson shall be retained to maintain efficient traffic flow and safety adjacent to existing roadways.*

   *e) Recycle and reuse construction and demolition waste (e.g. soil, vegetation, concrete, lumber, metal, and cardboard) per County Solid Waste procedures.*

   *f) The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew and educate all construction workers about the required waste reduction and the availability of recycling services.*

3. *GHG – Design Standards. The developer shall submit for review and obtain approval from County Planning that the following measures have been incorporated into the design of the*

*project. These are to reduce potential project impacts on green house gases (GHGs): Proper installation of the approved design features and equipment shall be confirmed by County Building and Safety prior to final inspection of each structure.*

a) *Meet Title 24 Energy Efficiency requirements implemented January 1, 2020. The Developer shall document that the design of the proposed structures meets the current Title 24 energy-efficiency requirements. County Planning shall coordinate this review with the County Building and Safety. Any combination of the following design features may be used to fulfill this requirement, provided that the total increase in efficiency meets or exceeds the cumulative goal (100%+ of Title 24) for the entire project (Title 24, Part 6 of the California Code of Regulations; Energy Efficiency Standards for Residential and Non Residential Buildings, as amended February 14, 2019; Cool Roof Coatings performance standards as amended February 14, 2019):*
   - *Incorporate dual paned or other energy efficient windows,*
   - *Incorporate energy efficient space heating and cooling equipment,*
   - *Incorporate energy efficient light fixtures, photocells, and motion detectors,*
   - *Incorporate energy efficient appliances,*
   - *Incorporate energy efficient domestic hot water systems,*
   - *Incorporate solar panels into the electrical system,*
   - *Incorporate cool roofs/light colored roofing,*
   - *Incorporate other measures that will increase energy efficiency.*
   - *Increase insulation to reduce heat transfer and thermal bridging.*
   - *Limit air leakage throughout the structure and within the heating and cooling distribution system to minimize energy consumption.*

b) *Plumbing. All plumbing shall incorporate the following:*
   - *All showerheads, lavatory faucets, and sink faucets shall comply with the California Energy Conservation flow rate standards.*
   - *Low flush toilets shall be installed where applicable as specified in California State Health and Safety Code Section 17921.3.*
   - *All hot water piping and storage tanks shall be insulated. Energy efficient boilers shall be used.*
   - *If possible, utilize grey water systems and dual plumbing for recycled water.*

c) *Lighting. Lighting design for building interiors shall support the use of:*
   - *Compact fluorescent light bulbs or equivalently efficient lighting.*
   - *Natural day lighting through site orientation and the use of reflected light.*
   - *Skylight/roof window systems.*

- *Light colored building materials and finishes shall be used to reflect natural and artificial light with greater efficiency and less glare.*
- *A multi-zone programmable dimming system shall be used to control lighting to maximize the energy efficiency of lighting requirements at various times of the day.*

d) *The developer may use rooftop solar panels in complying with the GHG Design Standards. If the developer uses solar as a way of increasing efficiency, the developer shall ensure that a minimum of 2.5 percent of the project's electricity needs is provided by on-site solar panels.*

e) *Building Design. Building design and construction shall incorporate the following elements:*

- *Orient building locations to best utilize natural cooling/heating with respect to the sun and prevailing winds/natural convection to take advantage of shade, day lighting and natural cooling opportunities.*
- *Utilize natural, low maintenance building materials that do not require finishes and regular maintenance..*
- *Roofing materials shall have a solar reflectance in compliance with Title 24, Cool Roof Coatings performance standards.*
- *All supply duct work shall be in compliance with Title 24, Part 6 Energy Efficiency Standards for Residential Buildings..*
- *Energy Star or equivalent equipment shall be installed.*
- *A building automation system including outdoor temperature/humidity sensors will control public area heating, vent, and air conditioning units*

f) *Landscaping. The developer shall submit for review and obtain approval from County Planning of landscape and irrigation plans that are designed to include drought tolerant and smog tolerant trees, shrubs, and groundcover to ensure the long-term viability and to conserve water and energy. The landscape plans shall include shade trees around main buildings, particularly along southern and western elevations, where practical.*

g) *Irrigation. The developer shall submit irrigation plans that are designed, so that all common area irrigation areas shall be capable of being operated by a computerized irrigation system, which includes either an on-site weather station, ET gauge or ET-based controller capable of reading current weather data and making automatic adjustments to independent run times for each irrigation valve based on changes in temperature, solar radiation, relative humidity, rain and wind. In addition, the computerized irrigation system shall be equipped with flow sensing capabilities, thus*

*automatically shutting down the irrigation system in the event of a mainline break or broken head. These features will assist in conserving water, eliminating the potential of slope failure due to mainline breaks and eliminating over-watering and flooding due to pipe and/or head breaks.*

*h) Recycling. Exterior storage areas for recyclables and green waste shall be provided. Adequate recycling containers shall be located in public areas. Construction and operation waste shall be collected for reuse and recycling.*

*i) Transportation Demand Management (TDM) Program. The project shall include adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. If available, mass transit facilities shall be provided (e.g. bus stop bench/shelter). The developer shall publish ride-sharing information for ride-sharing vehicles and provide a website or message board for coordinating rides. The Program shall ensure that appropriate bus route information is available to tenants and homeowners.*

*4. GHG – Installation/Implementation Standards. The developer shall submit for review and obtain approval from County Planning of evidence that all applicable GHG performance standards have been installed, implemented properly and that specified performance objectives are being met to the satisfaction of County Planning and County Building and Safety. These installations/ procedures include the following:*

*a) Design features and/or equipment that cumulatively provide the efficiency to meet or exceed Title 24 for the entire project (Title 24, Part 6 of the California Code of Regulations; Energy Efficiency Standards for Residential and Non Residential Buildings, as amended January 24, 2013; Cool Roof Coatings performance standards as amended January 24, 2013).*

b) *All interior building lighting shall support the use of fluorescent light bulbs or equivalent energy-efficient lighting.*

c) *Installation of both the identified mandatory and optional design features or equipment that have been constructed and incorporated into the facility/structure.*

# 3,000 MTCO2e Emission Level

The County determined the size of development that is too small to be able to provide the level of GHG emission reductions expected from the Screening Tables or alternate emission analysis method (described in Attachment D) based upon the 90$^{th}$ percentile capture rate concept. To do this the County determined the GHG emission amount allowed by a project such that 90 percent of the emissions on average from

projects would exceed that level and be "captured" by the Screening Table or alternate emission analysis method.

In determining this level of emissions the County used the database of Projects kept by the Governor's Office of Planning and Research (OPR). That database contained 798 Projects, 60 of which were extremely large General Plan Updates, Master Plans, or Specific Plan Projects. The 60 very large projects were removed from the database in order not to skew the emissions value, leaving a net of 738 Projects. In addition, 27 projects were found to be outliers that would skew the emission value to high, leaving 711 as the sample population to use in determining the 90$^{th}$ percentile capture rate. Note that while the OPR database is a statewide database and may not exactly reflect emissions within the County, this method was considered conservative because development projects within unincorporated San Bernardino County tend to have higher energy consumption rates and have longer commute distances than the statewide average. As such, using the statewide database may produce an emissions value for the 90$^{th}$ percentile capture rate that may capture more than 90 percent of emissions.

The analysis of the 738 Projects within the sample population combined commercial, residential, and mixed use projects. Also note that the sample of projects included warehousing and other industrial land uses but did not include industrial processes (i.e. oil refineries, heavy manufacturing, electric generating stations, mining operations, etc.). Emissions from each of these Projects were calculated by SCAQMD and provide a consistent method of emissions calculations across the sample population further reducing potential errors in the statistical analysis. In calculating the emissions from Projects within the sample population, construction period GHG emissions were amortized over 30-years (the average economic life of a development project).

# Large Residential Projects Located Outside a City Sphere of Influence

Residential Projects outside of a City Sphere of Influence that exceed 250 residential units will be required to prepare a project-specific GHG emissions analysis that includes a robust assessment of emissions, appropriate mitigation measures, and the issues associated with land use intensification and VMT generation on a project and regional basis. The analysis must produce an assessment that allows for a determination of whether the specific project causes cumulatively considerable GHG impacts. Residential Projects outside of a City Sphere of Influence that exceed 250 residential units will not qualify for the tiering and streamlining benefits otherwise provided by this Plan as allowed by CEQA Guidelines Section 15183.5 due to the inability to adequately analyze and incorporate programmatic mitigation that comprehensively addresses the issues of GHG emissions for regionally significant residential projects beyond the 2020 analysis horizon. It is anticipated that upon completion of the Sustainable Communities Strategy (SCS) by Southern California Association of Governments (SCAG) and the Regional GHG Reduction

Plan currently under preparation by the San Bernardino County Association of Governments (SANBAG), adequate methodology for quantification of regional VMT and more comprehensive mitigation will provide suitable planning tools that can be incorporated into this Plan through a future amendment. Both the SCS and the Regional GHG Reduction Plan are intended to satisfy the requirements of SB 375 and allow better forecasts of GHG emissions in future years, as well as providing a regional strategy for reducing GHG emissions. This provision provides a mechanism to ensure that these types of land use commitments outside of SOIs do not impede the expected emissions trajectory to mid-century and are not likely to conflict with the long term goal of GHG emissions reductions through 2045.

# ATTACHMENT 2:

SCREENING TABLES

# Screening Tables

The purpose of the Screening Tables is to provide guidance in measuring the reduction of GHG emissions attributable to certain design and construction measures incorporated into development projects. The analysis, methodology, and significance determination (thresholds) are based upon the GHG Reduction Plan and GHG Reduction Plan Update, which include GHG emission inventories (2008 and 2016); forecasts for years 2020, 2030, and 2045; GHG reduction targets for years 2020 and 2030; and the goals and policies to reach the targets. Appendix C of this document sets forth the methodology for the development and application of the Screening Tables and uses the California Air Pollution Control Officers Association (CAPCOA) guidance on quantifying project-level GHG reductions (CAPCOA 2010).

## INSTRUCTIONS FOR RESIDENTIAL, COMMERCIAL, OR INDUSTRIAL PROJECTS

The Screening Tables assign points for each option incorporated into a project as mitigation or a project design feature (collectively referred to as "feature"). The point values correspond to the minimum emissions reduction expected from each feature. The menu of features allows maximum flexibility and options for how development projects can implement the GHG reduction measures. The point levels are based upon improvements compared to 2016 emission levels of efficiency. Projects that garner at least 100 points will be consistent with the reduction quantities anticipated in the GHG Reduction Plan Update. Consistent with *CEQA Guidelines*, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.

Note that the Screening Tables use a base level of efficiency that corresponds to the California Building Energy Efficiency Standards for Residential and Non-residential Buildings (Title 24, Part 6) that became effective January 1, 2020. These are the statewide minimum requirements of efficiency that are currently in effect.

## INSTRUCTIONS FOR MIXED-USE PROJECTS

Mixed-use projects provide additional opportunities to reduce emissions by combining complementary land uses in a manner that can reduce vehicle trips. Mixed-use projects also have the potential to complement energy-efficient infrastructure in a way that reduces emissions. For mixed-use projects, both Table 1 and Table 2 should be filled out, but the points should be proportioned identical to the proportioning of the mix of uses. For example, a mixed-use project that is 50 percent commercial uses and 50 percent residential uses will show ½ point for each assigned point value in Table 1 and Table 2, and the points will be added from both tables. Mixed-use projects that garner at least 100 points will be consistent with the reduction quantities in the County's forthcoming GHG Reduction Plan Update and would be considered less than significant for GHG emissions.

Those projects that do not garner 100 points using the Screening Tables will need to provide additional analysis to determine the significance of GHG emissions. Nothing in this guidance shall be construed as limiting the County's authority to adopt a statement of overriding consideration for projects that require the preparation of an EIR due to significant GHG impacts. The following tables provide a menu of performance standards/options related to GHG mitigation measures and design features that can be used to demonstrate consistency with the reduction measures and GHG reduction quantities in the forthcoming GHG Reduction Plan Update.

## Table 1: Screening Table for Implementing GHG Performance Standards for Residential Development

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| **Reduction Measure Energy : Exceed Energy Efficiency Standards in New Residential Units** | | | |
| **Building Envelope** | | | |
| Insulation | • 2019 Title 24 Requirements (walls R-8, roof/attic R-30)<br>• Enhanced Insulation (rigid wall insulation R-13, roof/attic R-38)<br>• Greatly Enhanced Insulation (spray foam wall insulated walls R-18 or higher, roof/attic R-38 or higher) | 4 points<br>9 points<br>11 points | |
| Windows | • 2019 Title 24 Windows (0.3 U-factor, 0.23 solar heat gain coefficient [SHGC])<br>• Enhanced Window (0.28 U-Factor, 0.22 SHGC)<br>• Greatly Enhanced Window (less than 0.28 U-Factor, less than 0.22 SHGC) | 2 points<br>4 points<br>5 points | |
| Cool Roofs | • Enhanced Cool Roof (CRRC Rated 0.2 aged solar reflectance, 0.75 thermal emittance)<br>• Greatly Enhanced Cool Roof (CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance) | 6 points<br>7 points | |
| Air Infiltration | Minimizing leaks in the building envelope is as important as the insulation properties of the building. Insulation does not work effectively if there is excess air leakage.<br>• Air barrier applied to exterior walls, caulking, and visual inspection such as the HERS Verified Quality Insulation Installation (QII or equivalent)<br>• Blower Door HERS Verified Envelope Leakage or equivalent | <br><br>6 points<br><br>5 points | |
| Thermal Storage of Building | Thermal storage is a design characteristic that helps keep a constant temperature in the building. Common thermal storage devices include strategically placed water filled columns, water storage tanks, and thick masonry walls.<br>• Modest Thermal Mass (10% of floor or 10% of walls 12" or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood, or other insulating materials)<br>• Enhanced Thermal Mass (20% of floor or 20% of walls 12" or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood, or other insulating materials) | <br><br>1 point<br><br>2 points | |
| **Indoor Space Efficiencies** | | | |
| Heating/ Cooling Distribution System | • Minimum Duct Insulation (R-6 required)<br>• Enhanced Duct Insulation (R-8)<br>• Distribution loss reduction with inspection (HERS Verified Duct Leakage or equivalent) | 2 points<br>4 points<br>5 points<br>7 points | |
| Space Heating/ Cooling Equipment | • 2019 Title 24 Minimum HVAC Efficiency (SEER 13/75% AFUE or 7.7 HSPF)<br>• Improved Efficiency HVAC (SEER 14/78% AFUE or 8 HSPF)<br>• High Efficiency HVAC (SEER 15/80% AFUE or 8.5 HSPF)<br>• Very High Efficiency HVAC (SEER 16/82% AFUE or 9 HSPF) | 1 points<br>2 points<br>4 points<br>5 points | |

## Table 1: Screening Table for Implementing GHG Performance Standards for Residential Development

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| Water Heaters | • 2019 Title 24 Minimum Efficiency (0.57 Energy Factor)<br>• Improved Efficiency Water Heater (0.675 Energy Factor)<br>• High Efficiency Water Heater (0.72 Energy Factor)<br>• Very High Efficiency Water Heater ( 0.92 Energy Factor)<br>• Solar Pre-heat System (0.2 Net Solar Fraction)<br>• Enhanced Solar Pre-heat System (0.35 Net Solar Fraction) | 4 points<br>7 points<br>9 points<br>11 points<br>2 points<br>5 points | |
| Daylighting | Daylighting is the ability of each room within the building to provide outside light during the day reducing the need for artificial lighting during daylight hours.<br>• All peripheral rooms within the living space have at least one window (required)<br>• All rooms within the living space have daylight (through use of windows, solar tubes, skylights, etc.)<br>• All rooms daylighted | <br>0 points<br>1 point<br>1 point | |
| Artificial Lighting | • Efficient Lights (25% of in-unit fixtures considered high efficiency. High efficiency is defined as 40 lumens/watt for 15 watt or less fixtures; 50 lumens/watt for 15-40 watt fixtures, 60 lumens/watt for fixtures >40watt)<br>• High Efficiency Lights (50% of in-unit fixtures are high efficiency)<br>• Very High Efficiency Lights (100% of in-unit fixtures are high efficiency) | 5 points<br>6 points<br>7 points | |
| Appliances | • Energy Star Refrigerator (new)<br>• Energy Star Dishwasher (new)<br>• Energy Star Washing Machine (new) | 1 point<br>1 point<br>1 point | |
| **Miscellaneous Residential Building Efficiencies** | | | |
| Building Placement | North/south alignment of building or other building placement such that the orientation of the buildings optimizes natural heating, cooling, and lighting. | 3 points | |
| Shading | At least 90% of south-facing glazing will be shaded by vegetation or overhangs at noon on June 21st. | 2 points | |
| Energy Star Homes | EPA Energy Star for Homes (version 3 or above) | 15 points | |
| Independent Energy Efficiency Calculations | Provide point values based upon energy efficiency modeling of the project. Note that engineering data will be required documenting the energy efficiency and point values based upon the proven efficiency beyond Title 24 Energy Efficiency Standards. | TBD | |
| Other | This allows innovation by the applicant to provide design features that increase the energy efficiency of the project not provided in the table. Note that engineering data will be required documenting the energy efficiency of innovative designs and point values given based upon the proven efficiency beyond Title 24 Energy Efficiency Standards. | TBD | |
| Existing Residential Retrofits | Having residential developments within walking and biking distances of local retail helps to reduce vehicle trips and/or vehicle miles traveled.<br>The point value of residential projects in close proximity to local retail will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled (VMT).<br>The suburban project will have at least three of the following on site and/or off site within ¼-mile: Residential Development, Retail Development, Park, Open Space, or Office.<br>The mixed-use development should encourage walking and other non-auto modes of transport from residential to office/commercial locations (and vice versa). The project should minimize the need for external trips by including services/facilities for daycare, banking/ATM, restaurants, vehicle refueling, and shopping. | TBD | |

## Table 1: Screening Table for Implementing GHG Performance Standards for Residential Development

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| **Reduction Measure Energy 3: All Electric Homes** | | | |
| All-Electric Homes | All electric homes reduce GHG emissions, as the grid electricity they use is generated using less carbon over time. Grid electricity in California will be 60 percent renewable energy by 2030 and 100 percent renewable energy by 2040. | 12 points | |
| **Reduction Measure Energy-7: Clean Energy** | | | |
| **Residential Renewable Energy Generation** | | | |
| Photovoltaic | Solar Photovoltaic panels installed on individual homes or in collective neighborhood arrangements such that the total power provided augments:<br>• 30 percent of the power needs of the project<br>• 40 percent of the power needs of the project<br>• 50 percent of the power needs of the project<br>• 60 percent of the power needs of the project<br>• 70 percent of the power needs of the project<br>• 80 percent of the power needs of the project<br>• 90 percent of the power needs of the project<br>• 100 percent of the power needs of the project | 9 points<br>12 points<br>17 points<br>20 points<br>23 points<br>25 points<br>28 points<br>31 points | |
| Wind Turbines | Some areas of the County lend themselves to wind turbine applications. Analysis of the areas' capability to support wind turbines should be evaluated prior to choosing this feature. Individual wind turbines at homes or collective neighborhood arrangements of wind turbines such that the total power provided augments:<br>• 30 percent of the power needs of the project<br>• 40 percent of the power needs of the project<br>• 50 percent of the power needs of the project<br>• 60 percent of the power needs of the project<br>• 70 percent of the power needs of the project<br>• 80 percent of the power needs of the project<br>• 90 percent of the power needs of the project<br>• 100 percent of the power needs of the project | 9 points<br>12 points<br>17 points<br>21 points<br>23 points<br>25 points<br>28 points<br>31 points | |
| Off-site Renewable Energy Project | The applicant may submit a proposal to supply an off-site renewable energy project such as renewable energy retrofits of existing homes. These off-site renewable energy retrofit project proposals will be determined on a case-by-case basis and shall be accompanied by a detailed plan that documents the quantity of renewable energy the proposal would generate. Point values will be determined based upon the energy generated by the proposal. | TBD | |
| Other Renewable Energy Generation | The applicant may have innovative designs or unique site circumstances (such as geothermal) that allow the project to generate electricity from renewable energy not provided in the table. The ability to supply other renewable energy and the point values allowed will be decided based upon engineering data documenting the ability to generate electricity. | TBD | |

## Table 1: Screening Table for Implementing GHG Performance Standards for Residential Development

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| **Reduction Measure Water : Exceed Water Efficiency Standards** | | | |
| **Residential Irrigation and Landscaping** | | | |
| Water Efficient Landscaping | • Limit conventional turf to < 25% of required landscape area<br>• Limit conventional turf to < 50% of required landscape area<br>• No conventional turf (warm season turf to < 50% of required landscape area and/or low water using plants are allowed)<br>• Only California Native Plants that require no irrigation or some supplemental irrigation | 0 points<br>2 points<br>4 points<br>5 points | |
| Water Efficient Irrigation Systems | • Low precipitation spray heads < 0.75"/hr or drip irrigation<br>• Weather based irrigation control systems or moisture sensors (demonstrate 20% reduced water use) | 1 point<br>2 points | |
| Storm Water Reuse Systems | Innovative on-site storm water collection, filtration, and reuse systems are being developed that provide supplemental irrigation water and provide vector control. These systems can greatly reduce the irrigation needs of a project. Point values for these types of systems will be determined based upon design and engineering data documenting the water savings. | TBD | |
| **Residential Potable Water** | | | |
| Showers | Water Efficient Showerheads (2.0 gpm) | 2 points | |
| Toilets | Water Efficient Toilets (1.5 gpm) | 2 points | |
| Faucets | Water Efficient Faucets (1.28 gpm) | 2 points | |
| Dishwasher | Water Efficient Dishwasher (6 gallons per cycle or less) | 1 point | |
| Washing Machine | Water Efficient Washing Machine (Water factor <5.5) | 1 point | |
| WaterSense | EPA WaterSense Certification | 7 points | |
| **Increase Residential Reclaimed Water Use** | | | |
| Recycled Water | 5% of the total project's water use comes from recycled/reclaimed water | 5 points | |
| **Reduction Measure On Road: Alternative Transportation Options** | | | |
| **Increase Residential Density** | | | |
| Residential Density | Designing the project with increased densities, where allowed by the General Plan and/or Zoning Ordinance, reduces GHG emissions associated with traffic in several ways. Increased densities affect the distance people travel and provide greater options for the modes of travel they choose. This strategy also provides a foundation for implementation of many other strategies, which would benefit from increased densities.<br>1 point is allowed for each 10% increase in density beyond 7 units/acre, up to 500% (50 points) | 1–50 points | |

## Table 1: Screening Table for Implementing GHG Performance Standards for Residential Development

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| **Mixed-Use Development** | | | |
| Mixed-Use | Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GHG emissions. The point value of mixed-use projects will be determined based upon a Transportation Impact Analysis (TIA) demonstrating trip reductions and/or reductions in vehicle miles traveled. Suggested ranges:<br>• Diversity of land uses complementing each other (2–28 points)<br>• Increased destination accessibility other than transit (1–18 points)<br>• Increased Transit Accessibility (1–25 points)<br>• Infill location that reduces vehicle trips or VMT beyond the measures described above (points TBD based on traffic data). | TBD | |
| Residential Near Local Retail (Residential-only Projects) | Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled.<br>The point value of residential projects in close proximity to local retail will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled (VMT).<br>The suburban project will have at least three of the following on site and/or off site within ¼-mile: Residential Development, Retail Development, Park, Open Space, or Office.<br>The mixed-use development should encourage walking and other non-auto modes of transport from residential to office/commercial locations (and vice versa). The project should minimize the need for external trips by including services/facilities for day care, banking/ATM, restaurants, vehicle refueling, and shopping. | 1–16 points | |
| **Traffic Flow Management Improvements** | | | |
| Signal Synchroni-zation | Techniques for improving traffic flow include: traffic signal coordination to reduce delay, incident management to increase response time to breakdowns and collisions, Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions, and speed management to reduce high free-flow speeds.<br>• Signal synchronization<br>• Traffic signals connected to existing ITS | <br><br><br><br><br>1 point/signal<br>3 points/signal | |
| **Increase Public Transit** | | | |
| Public Transit Access | The point value of a project's ability to increase public transit use will be determined based upon a Transportation Impact Analysis (TIA) demonstrating decreased use of private vehicles and increased use of public transportation.<br>Increased transit accessibility (1–15 points) | TBD | |
| **Reduction Measure: Adopt and Implement a Bicycle Master Plan to Expand Bike Routes around the County** | | | |
| Sidewalks | • Provide sidewalks on both sides of the street (required)<br>• Provide pedestrian linkage between residential and commercial uses within 1 mile | 1 point<br>3 points | |
| Bicycle Paths | • Provide bicycle paths within project boundaries<br>• Provide bicycle path linkages between residential and other land uses<br>• Provide bicycle path linkages between residential and transit | TBD<br>2 points<br>5 points | |

## Table 1: Screening Table for Implementing GHG Performance Standards for Residential Development

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| **Reduction Measure Waste-2 : Reduce Waste to Landfills** | | | |
| Recycling | County-initiated recycling program diverting 100% of waste requires coordination in neighborhoods to realize this goal. The following recycling features will help the County fulfill this goal:<br>• Provide green waste composting bins at each residential unit<br>• Multifamily residential projects that provide dedicated recycling bins separated by types of recyclables combined with instructions/education program explaining how to use the bins and the importance of recycling<br>• Construction waste recycling | <br><br><br>4 points<br>3 points<br><br><br>4 points | |
| **Other GHG Reduction Feature Implementation** | | | |
| Other GHG Emissions Reduction Features | This allows innovation by the applicant to provide residential design features for the GHG emissions from construction and/or operation of the project not provided in the table. Note that engineering data will be required documenting the GHG reduction amount and point values given based upon emission reductions calculations using approved models, methods, and protocols. | TBD | |
| **Total Points Earned by Residential Project:** | | | |

## Table 2: Screening Table for Implementing GHG Performance Standards for Commercial Development and Public Facilities

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| **Reduction Measure Energy: Exceed Energy Efficiency Standards in New Commercial Units** | | | |
| **Building Envelope** | | | |
| Insulation | • 2019 Title 24 Requirements (walls R-16; roof/attic R-32)<br>• Modestly Enhanced Insulation (walls R-15, roof/attic R-38)<br>• Enhanced Insulation (rigid wall insulation R-13, roof/attic R-38)<br>• Greatly Enhanced Insulation (spray foam insulated walls R-18 or higher, roof/attic R-38 or higher) | 0 points<br>9 points<br>11 points<br>12 points | |
| Windows | • 2019 Title 24 Windows (0.57 U-factor, 0.4 SHGC)<br>• Modestly Enhanced Window Insulation (0.4 U-factor, 0.32 SHGC)<br>• Enhanced Window Insulation (0.32 U-factor, 0.25 SHGC)<br>• Greatly Enhanced Window Insulation (0.28 or less U-factor, 0.22 or less SHGC) | 0 points<br>4 points<br>5 points<br>7 points | |
| Cool Roofs | • Enhanced Cool Roof (CRRC Rated 0.2 aged solar reflectance, 0.75 thermal emittance)<br>• Greatly Enhanced Cool Roof ( CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance) | 8 points<br>10 points | |
| Air Infiltration | Minimizing leaks in the building envelope is as important as the insulation properties of the building. Insulation does not work effectively if there is excess air leakage.<br>• Air barrier applied to exterior walls, caulking, and visual inspection such as the HERS Verified Quality Insulation Installation (QII or equivalent)<br>• Blower Door HERS Verified Envelope Leakage or equivalent | <br><br><br>7 points<br><br>6 points | |
| Thermal Storage of Building | Thermal storage is a design characteristic that helps keep a constant temperature in the building. Common thermal storage devices include strategically placed water filled columns, water storage tanks, and thick masonry walls.<br>• Modest Thermal Mass (10% of floor or 10% of walls 12" or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood, or other insulating materials)<br>• Enhanced Thermal Mass (20% of floor or 20% of walls 12" or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood, or other insulating materials)<br>• Enhanced Thermal Mass (80% of floor or 80% of walls 12" or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood, or other insulating materials) | <br><br><br>2 points<br><br><br>4 points<br><br><br>14 points | |
| **Indoor Space Efficiencies** | | | |
| Heating/Cooling Distribution System | • Modest Duct insulation (R-6 required)<br>• Enhanced Duct Insulation (R-8)<br>• Distribution loss reduction with inspection (HERS Verified Duct Leakage or equivalent) | 0 points<br>6 points<br>8 points | |
| Space Heating/ Cooling Equipment | • 2019 Title 24 Minimum HVAC Efficiency (SEER 13/75% AFUE or 7.7 HSPF)<br>• Improved Efficiency HVAC (SEER 14/78% AFUE or 8 HSPF) | 0 points<br>4 points | |

## Table 2: Screening Table for Implementing GHG Performance Standards for Commercial Development and Public Facilities

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| | • High Efficiency HVAC (SEER 15/80% AFUE or 8.5 HSPF)<br>• Very High Efficiency HVAC (SEER 16/82% AFUE or 9 HSPF) | 5 points<br>7 points | |
| Commercial Heat Recovery Systems | Heat recovery strategies employed with commercial laundry, cooking equipment, and other commercial heat sources for reuse in HVAC air intake or other appropriate heat recovery technology. Point values for these types of systems will be determined based upon design and engineering data documenting the energy savings. | TBD | |
| Water Heaters | • 2019 Title 24 Minimum Efficiency (0.57 Energy Factor)<br>• Improved Efficiency Water Heater (0.675 Energy Factor)<br>• High Efficiency Water Heater (0.72 Energy Factor)<br>• Very High Efficiency Water Heater (0.92 Energy Factor)<br>• Solar Pre-heat System (0.2 Net Solar Fraction)<br>• Enhanced Solar Pre-heat System (0.35 Net Solar Fraction) | 0 points<br>8 points<br>10 points<br>11 points<br>2 points<br>5 points | |
| Daylighting | Daylighting is the ability of each room within the building to provide outside light during the day reducing the need for artificial lighting during daylight hours.<br>• All peripheral rooms within building have at least one window or skylight<br>• All rooms within building have daylight (through use of windows, solar tubes, skylights, etc.)<br>• All rooms daylighted | <br>0 points<br>1 point<br>1 point | |
| Artificial Lighting | • Efficient Lights (25% of in-unit fixtures considered high efficiency. High efficiency is defined as 40 lumens/watt for 15 watt or less fixtures; 50 lumens/watt for 15-40 watt fixtures, 60 lumens/watt for fixtures >40 watt)<br>• High Efficiency Lights (50% of in-unit fixtures are high efficiency)<br>• Very High Efficiency Lights (100% of in-unit fixtures are high efficiency) | 5 points<br>7 points<br>8 points | |
| Appliances | • Energy Star Commercial Refrigerator (new)<br>• Energy Star Commercial Dishwasher (new)<br>• Energy Star Commercial Clothes Washer (new) | 2 points<br>2 points<br>2 points | |
| **Miscellaneous Commercial Building Efficiencies** | | | |
| Building Placement | North/south alignment of building or other building placement such that the orientation of the buildings optimizes conditions for natural heating, cooling, and lighting. | 4 points | |
| Shading | At least 90% of south-facing glazing will be shaded by vegetation or overhangs at noon on June 21st. | 6 points | |
| Other | This allows innovation by the applicant to provide design features that increase the energy efficiency of the project not provided in the table. Note that engineering data will be required documenting the energy efficiency of innovative designs and point values given based upon the proven efficiency beyond Title 24 Energy Efficiency Standards. | TBD | |
| Existing Commercial Buildings Retrofits | The applicant may wish to provide energy efficiency retrofit projects to existing commercial buildings to further the point value of their project. Retrofitting existing commercial buildings within the County is a key reduction measure that is needed to reach the reduction goal. The | TBD | |

## Table 2: Screening Table for Implementing GHG Performance Standards for Commercial Development and Public Facilities

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| | potential for an applicant to take advantage of this program will be decided on a case-by-case basis and shall have the approval from the County of San Bernardino Planning Department. The decision to allow applicants to participate in this program will be evaluated based upon, but not limited to the following:<br>• Will the energy efficiency retrofit project benefit low income or disadvantaged communities?<br>• Does the energy efficiency retrofit project provide co-benefits important to the County?<br>• Point value will be determined based upon engineering and design criteria of the energy efficiency retrofit project. | | |
| **Reduction Measure Energy-3: All Electric Buildings** | | | |
| All-Electric Buildings | All electric buildings reduce GHG emissions, as the grid electricity they use is generated using less carbon over time. Grid electricity in California will be 60 percent renewable energy by 2030 and 100 percent renewable energy by 2040. | 15 points | |
| **Reduction Measure Energy-7: Clean Energy** | | | |
| **Commercial/Industrial Renewable Energy Generation** | | | |
| Photovoltaic | Solar Photovoltaic panels installed on commercial buildings or in collective arrangements within a commercial development such that the total power provided augments:<br>• 30 percent of the power needs of the project<br>• 40 percent of the power needs of the project<br>• 50 percent of the power needs of the project<br>• 60 percent of the power needs of the project<br>• 70 percent of the power needs of the project<br>• 80 percent of the power needs of the project<br>• 90 percent of the power needs of the project<br>• 100 percent of the power needs of the project | <br><br>8 points<br>12 points<br>16 points<br>19 points<br>23 points<br>26 points<br>30 points<br>34 points | |
| Wind Turbines | Some areas of the County lend themselves to wind turbine applications. Analysis of the areas capability to support wind turbines should be evaluated prior to choosing this feature.<br>Wind turbines as part of the commercial development such that the total power provided augments:<br>• 30 percent of the power needs of the project<br>• 40 percent of the power needs of the project<br>• 50 percent of the power needs of the project<br>• 60 percent of the power needs of the project<br>• 70 percent of the power needs of the project<br>• 80 percent of the power needs of the project<br>• 90 percent of the power needs of the project<br>• 100 percent of the power needs of the project | <br><br><br><br>8 points<br>12 points<br>16 points<br>19 points<br>23 points<br>26 points<br>30 points<br>34 points | |
| Off-site Renewable Energy Project | The applicant may submit a proposal to supply an off-site renewable energy project such as renewable energy retrofits of existing residential or existing commercial/industrial. These off-site renewable energy retrofit project proposals will be determined on a case-by-case basis accompanied by a detailed plan documenting the quantity of renewable energy the | TBD | |

## Table 2: Screening Table for Implementing GHG Performance Standards for Commercial Development and Public Facilities

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| | proposal will generate. Point values will be based upon the energy generated by the proposal. | | |
| Other Renewable Energy Generation | The applicant may have innovative designs or unique site circumstances (such as geothermal) that allow the project to generate electricity from renewable energy not provided in the table. The ability to supply other renewable energy and the point values allowed would be decided based upon engineering data documenting the ability to generate electricity. | TBD | |
| **Reduction Measure Water 1-3: Exceed Water Efficiency Standards** | | | |
| **Commercial Irrigation and Landscaping** | | | |
| Water Efficient Landscaping | • Eliminate conventional turf from landscaping<br>• Only moderate water using plants<br>• Only low water using plants<br>• Only California Native landscape that requires no or only supplemental irrigation | 0 point<br>2 points<br>3 points<br>5 points | |
| Water Efficient Irrigation Systems | • Low precipitation spray heads < 0.75"/hr or drip irrigation<br>• Weather based irrigation control systems combined with drip irrigation (demonstrate 20% reduced water use) | 1 point<br>3 points | |
| Storm Water Reuse Systems | Innovative on-site storm water collection, filtration, and reuse systems are being developed that provide supplemental irrigation water and provide vector control. These systems can greatly reduce the irrigation needs of a project. Point values for these types of systems will be determined based upon design and engineering data documenting the water savings. | TBD | |
| **Commercial Potable Water** | | | |
| Showers | Water Efficient Showerheads (2.0 gpm) | 2 points | |
| Toilets | • Water Efficient Toilets/Urinals (1.5 gpm)<br>• Waterless Urinals (note that commercial buildings having both waterless urinals and high efficiency toilets will have a combined point value of 6 points) | 3 points<br>3 points | |
| Faucets | Water Efficient faucets (1.28 gpm) | 2 points | |
| Commercial Dishwashers | Water Efficient dishwashers (20% water savings) | 2 points | |
| Commercial Laundry Washers | • Water Efficient laundry (15% water savings)<br>• High Efficiency laundry equipment that captures and reuses rinse water (30% water savings) | 2 points<br>4 points | |
| Commercial Water Operations Program | Establish an operational program to reduce water loss from pools, water features, etc., by covering pools, adjusting fountain operational hours, and using water treatment to reduce draw down and replacement of water. Point values for these types of plans will be determined based upon design and engineering data documenting the water savings. | TBD | |
| **Increase Commercial/Industrial Reclaimed Water Use** | | | |
| Recycled Water | Graywater (purple pipe) irrigation system on site | 5 points | |
| **Reduction Measure On Road: Alternative Transportation Options** | | | |
| **Mixed-Use Development** | | | |
| Mixed-Use | Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GHG emissions. The point value of | TBD | |

## Table 2: Screening Table for Implementing GHG Performance Standards for Commercial Development and Public Facilities

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| | mixed-use projects will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled. | | |
| Local Retail Near Residential (Commercial only Projects) | Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled. The point value of residential projects in close proximity to local retail will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled. | TBD | |
| **Preferential Parking** | | | |
| Parking | • Provide reserved preferential parking spaces for car-share, carpool, and ultra-low or zero emission vehicles.<br>• Provide larger parking spaces that can accommodate vans used for ride-sharing programs and reserve them for vanpools and include adequate passenger waiting/loading areas. | 1 point<br>1 point | |
| **Signal Synchronization and Intelligent Traffic Systems** | | | |
| Signal Improvements | Techniques for improving traffic flow include: traffic signal coordination to reduce delay, incident management to increase response time to breakdowns and collisions, Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions, and speed management to reduce high free-flow speeds.<br>• Synchronize signals along arterials used by project.<br>• Connect signals along arterials to existing ITS. | 1 point/signal<br>3 points/signal | |
| **Increase Public Transit** | | | |
| Public Transit | The point value of a project's ability to increase public transit use will be determined based upon a Transportation Impact Analysis (TIA) demonstrating decreased use of private vehicles and increased use of public transportation.<br>Increased transit accessibility (1–15 points) | TBD | |
| **Reduction Measure: Adopt and Implement a Bicycle Master Plan to Expand Bike Routes around the County** | | | |
| Sidewalks | • Provide sidewalks on both sides of the street (required)<br>• Provide pedestrian linkage between commercial and residential land uses within 1 mile | 0 points<br>3 points | |
| Bicycle Paths | • Provide bicycle paths within project boundaries<br>• Provide bicycle path linkages between commercial and other land uses<br>• Provide bicycle path linkages between commercial and transit | 1 point<br>2 points<br>5 points | |
| **Reduction Measure: Reduce Waste to Landfills** | | | |
| Recycling | County initiated recycling program diverting 80% of waste requires coordination with commercial development to realize this goal. The following recycling features will help the County fulfill this goal:<br>• Provide separated recycling bins within each commercial building/floor and provide large external recycling collection bins at central location for collection truck pick-up | 2 points | |

## Table 2: Screening Table for Implementing GHG Performance Standards for Commercial Development and Public Facilities

| Feature | Description | Assigned Point Values | Project Points |
|---|---|---|---|
| | • Provide commercial/industrial recycling programs that fulfills an on-site goal of 80% diversion of solid waste<br>• Recycle construction waste | 5 points<br>4 points | |
| **Other GHG Reduction Feature Implementation** | | | |
| Other GHG Emissions Reduction Features | This allows innovation by the applicant to provide commercial design features that the GHG emissions from construction and/or operation of the project not provided in the table. Note that engineering data will be required documenting the GHG reduction amount and point values given based upon emission reductions calculations using approved models, methods, and protocols. | TBD | |
| **Total Points Earned by Commercial/Industrial Project:** | | | |

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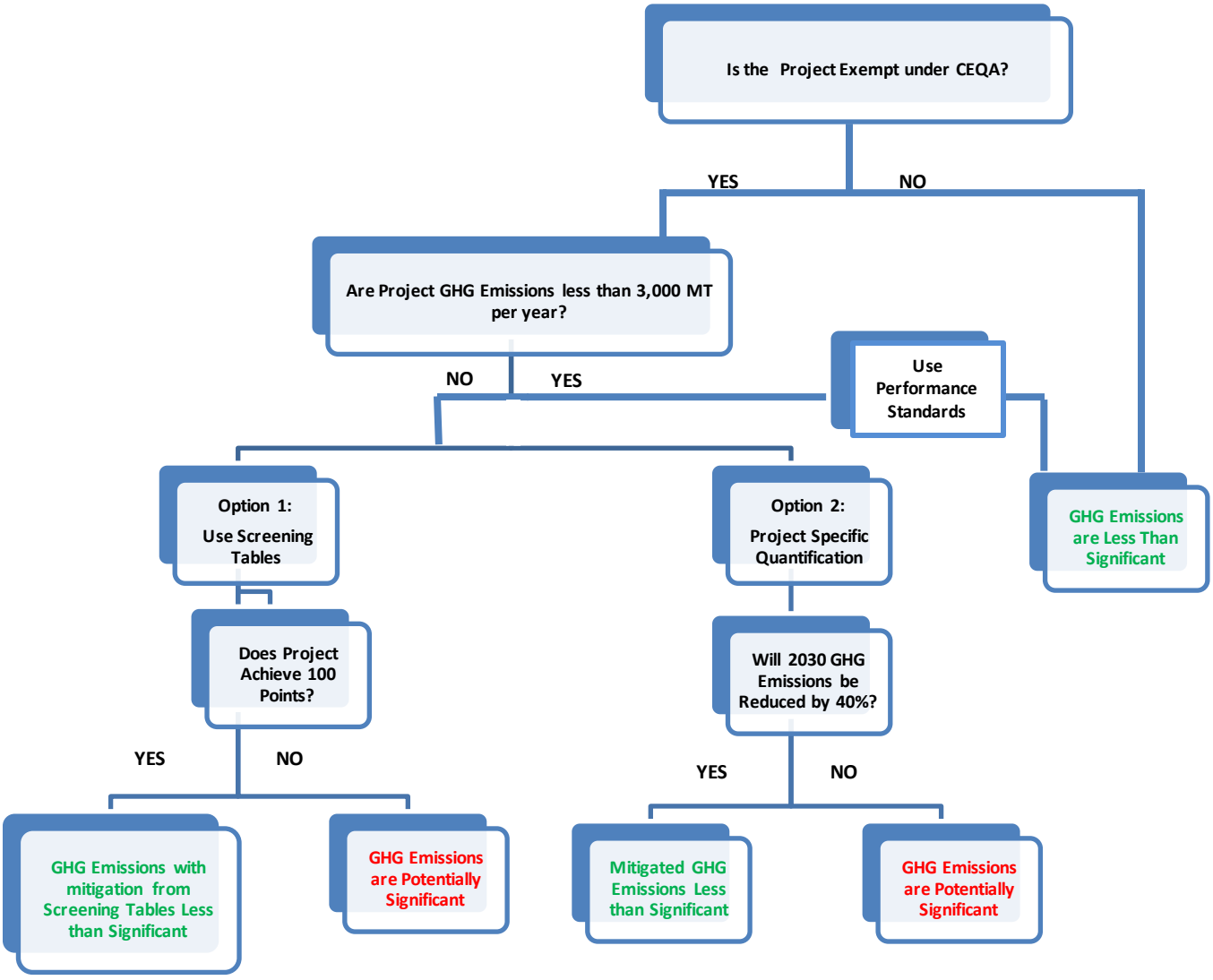
# APPENDIX A: GHG DEVELOPMENT REVIEW PROCESS FLOW CHART DIAGRAM

# Approach to Implementation of GHG Development Review



# APPENDIX B: TRANSIT PRIORITY PROJECT AND SUSTAINABLE COMMUNITY PROJECT CHECKLIST

# TRANSIT PRIORITY PROJECT CHECKLIST

The following checklist will assist in determining if your project qualifies as a Transit Priority Project (TPP) and a Sustainable Community Project (SCP) as defined in PRC 21155(a), (b), and PRC 21152.

| Yes | No | | Is the project: |
|---|---|---|---|
| ☐ | ☐ | 1. | Located within ½ mile of a trolley station, future station, or transit center? |
| ☐ | ☐ | 2. | At least 50% residential use, based upon total square footage, and non-residential uses within the project between 26% and 50% of total square footage with FAR of not less than 0.75? |
| ☐ | ☐ | 3. | At or above a minimum net density of at least 20 dwelling units per acre? |
| ☐ | ☐ | 4. | Is your project consistent with the general land use designations in the SCP (if you answered yes to questions 1 through 3, then answer yes to this one)? |

If you answered **Yes** to questions 1 through 4 then your project is a Transit Priority Project (TPP) as defined by PRC Section 21155(b). Continue with the next list of environmental questions:

| Yes | No | | Does the project: |
|---|---|---|---|
| ☐ | ☐ | 5. | Contain sites on the Cortese List? |
| ☐ | ☐ | 6. | Site contain any hazardous substances, contaminated soil or hazardous material? |
| ☐ | ☐ | 7. | Site include historical resources? |
| ☐ | ☐ | 8. | Have an unusually high risk of fire or explosion from material stored or used at properties within ¼ mile of the project site? |
| ☐ | ☐ | 9. | Site currently include areas developed as Open Space (parks, habitat, etc.)? |

Continue with the next list of land use questions below:

| Yes | No | | |
|---|---|---|---|
| ☐ | ☐ | 10. | Does the project design have all the buildings at least 15% more efficient than Title 24 energy standards and uses 25% or less water than average households? |
| ☐ | ☐ | 11. | Is the project site eight acres or less in size? |
| ☐ | ☐ | 12. | The project does not include any single level of a building exceeding 75 TSF? |
| ☐ | ☐ | 13. | The project does not conflict with nearby industrial uses? |
| ☐ | ☐ | 14. | The project will sell at least 20% of housing to families of moderate income, or 10% of housing will be rented to families of low income, or at least 5% of housing will be rented to families of very low income, or the project provides open space equal or greater than 5 acres per 1,000 residents, or the developer will pay in-lieu fees sufficient to result in the development of affordable housing meeting one of the criteria described above? |

Determining Eligibility based upon the answers:

**Full CEQA Exemption for Sustainable Community Projects (SCPs)**

If you answered **Yes** to all the TPP questions 1 through 4, **No** to all the environmental questions 5 through 9, and **Yes** to all the land use questions 10 through 14, then your project is an SCP and is eligible for a full CEQA Exemption under SB 375.

**Transit Priority Projects (TPP)**

If you answered **Yes** to all the TPP questions 1 through 4, but did not qualify as an SCP then your project is a TPP. Your TPP needs to incorporate all appropriate mitigation measures required by an applicable CEQA document (such as an adopted EIR for a Specific Plan) for your project location. If your TPP meets these two criteria then your TPP does not need to analyze the following impacts in the Sustainable Communities Environmental Assessment (SCEA) or CEQA analysis:

- Growth-inducing impacts,
- Regional transportation impacts, and
- GHG emissions related to passenger cars and light-duty trucks.

The impacts listed above are considered less than significant because the project is a TPP and the SCEA or CEQA document should reference PRC Section 21155.2(c)

**Other Residential and Mixed-Use Projects**

If you answered Yes to question 4, but did not qualify as an SCP or TPP, your project may not need to analyze some of the impacts in the CEQA analysis if your project is a **residential project or mixed-use project with 75%** of the total building square footage of the project is residential units. In addition, your project needs to incorporate all appropriate mitigation measures required by an applicable prior CEQA document (such as an adopted EIR for a Specific Plan) for your project location. If your project meets these criteria, then the CEQA analysis of your project does not need to analyze the following impacts:

- Growth-inducing impacts,
- Regional transportation impacts, and
- GHG emissions related to passenger cars and light-duty trucks.

The impacts listed above are considered less than significant because the project meets the criteria in PRC Section 21155.2(c)

# APPENDIX C: METHODOLOGY FOR THE DEVELOPMENT AND APPLICATION OF THE SCREENING TABLES

# METHODS SUMMARY

The point values in the Screening Tables were derived from the projected emissions reductions that would be achieved by each of the reduction measures associated with new development within the County of San Bernardino forthcoming GHG Reduction Plan Update. The points within the Screening Tables were proportioned by residential unit or square footage of commercial/industrial uses. This was accomplished by taking the predicted growth in households and commercial uses in 2030 and proportioning the appropriate reduction quantities for new development to the residential, commercial, and industrial land use sectors within the Screening Tables. This results in point values that are proportioned by residential unit or commercial/industrial square footage. Because of this outcome, the size of the project is not relevant to the Screening Tables. Regardless of size, each project needs to garner 100 points to demonstrate consistency with the forthcoming GHG Reduction Plan Update. Efficiency, not size of the project, is critical.

Note that the Screening Tables and point values are best used for typical development projects processed by the County. Examples of typical development projects include residential subdivisions, multifamily residential apartments, condominiums, and townhouses, retail commercial, big box retail, office buildings, business parks, and typical warehousing. Mixed-use projects can use the instructions at the beginning of the Screening Tables. Transit-oriented development (TOD) and infill projects are able to use the Screening Tables; however, the Screening Table points are likely to underestimate total emission reductions afforded these types of projects. Note that the Screening Tables include the opportunity to custom develop points in order to provide points in the sections of the Screening Tables marked TBD and account for the predicted reductions in vehicle trips and vehicle miles traveled within a project-specific traffic study and GHG analysis. TOD and infill projects can be more accurately assessed and points allocated using this method.

However, more unusual types of industrial projects, such as cement manufacturing, metal foundries, refrigerant manufacturing, electric generating stations—including large alternative energy electric generation, and oil refineries, cannot use the Screening Tables because the emission sources for those types of uses were not contemplated in the forthcoming GHG Reduction Plan Update.

# DEVELOPMENT OF THE POINT VALUES

Within the local reduction measures, 7,891 MT $CO_2$e would be reduced using the Screening Tables for new development. The Screening Tables and the point allocation within the Screening Tables are tied to 7,891 MT $CO_2$e of reductions.

The first step in allocating point values is to determine the number of new homes and commercial buildings that are anticipated by year 2030. The County predicts that a total of 6,167 new residential units

will be needed by 2030 and a total of approximately 4,851,000 square feet of new commercial and industrial buildings within the County is needed to accommodate anticipated job growth.

Approximately 6,167 new residential units and 4,851,000 square feet of new commercial and industrial buildings within the County are anticipated to either use the Screening Tables or provide an independent analysis demonstrating reductions. Evaluating the growth in residential and commercial/industrial land uses, approximately 69.6 percent is attributable to residential and 30.4 percent is attributable to commercial/industrial land uses. Using those ratios, the Screening Tables would need to reduce 5,491 MT $CO_2e$ from residential development and 2,400 MT $CO_2e$ from commercial/industrial development by 2030.

Dividing the 5,491 MT $CO_2e$ reductions of emissions afforded the Screening Table for new residential development by the anticipated 6,167 new residential units that will be built yields 0.89 MT $CO_2e$ per residential unit that needs to be reduced to fulfill the anticipated reductions of the GHG Reduction Plan Update. Using the same process, the Screening Tables for new commercial/industrial development would need to reduce 0.50 MT $CO_2e$ per 1,000 gross square feet of commercial/industrial building area.

The levels of reduction efficiency for typical residential units in this climate zone yields:

**0.009 MT $CO_2e$ per Point per Residential Unit**

The levels of reduction efficiency for the mix of commercial/industrial uses in this climate zone yields:

**0.005 MT $CO_2e$ per Point per 1,000 Square Feet of Gross Commercial/Industrial Building Area**

Since each residential unit needs to reduce 0.89 MT $CO_2e$ and each 1,000 square feet of commercial/ industrial building area needs to reduce 0.50 MT $CO_2e$, each project needs to gain 100 points to provide the expected reductions from the Screening Tables.

# EXHIBIT B

# Addendum to the San Bernardino Greenhouse Gas Reduction Plan Supplemental Environmental Impact Report

# GREENHOUSE GAS REDUCTION PLAN UPDATE 2021
# COUNTY OF SAN BERNARDINO
# ADDENDUM TO THE SAN BERNARDINO GREENHOUSE GAS REDUCTION PLAN
# SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

## State Clearinghouse No. 2005101038

**Lead Agency:**

**County of San Bernardino Land Use Services Department**
**385 N. Arrowhead Avenue 1st Floor**
**San Bernardino, California 92415**

**Prepared by:**

**LSA Associates, Inc.**
**1500 Iowa Avenue, Suite 200**
**Riverside, California 92507**

**SAN BERNARDINO COUNTY GREENHOUSE GAS REDUCTION PLAN UPDATE**
**SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT ADDENDUM**

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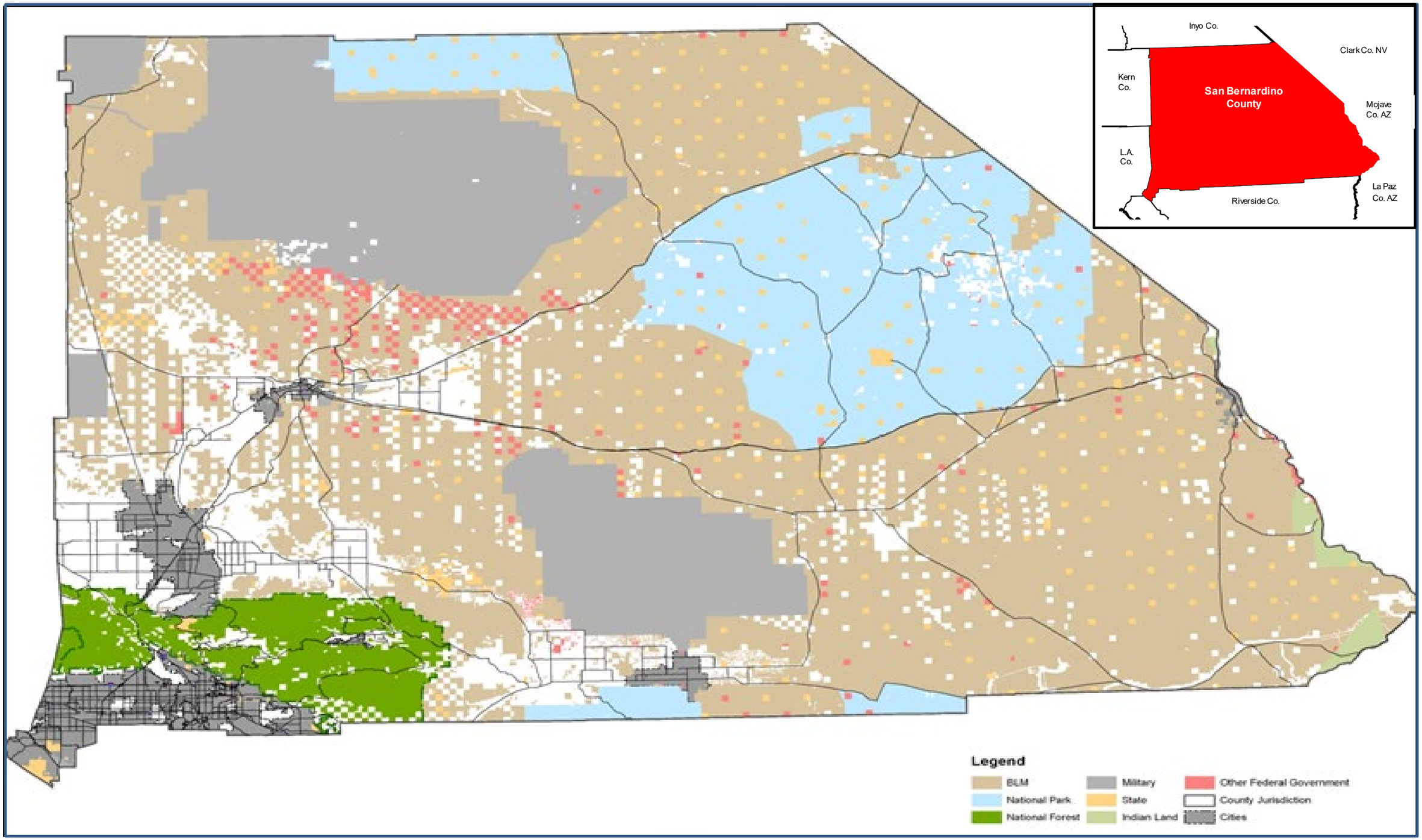
# SECTION 1.0 INTRODUCTION

## 1.1 SUMMARY

| | |
|---|---|
| **Project Title:** | Greenhouse Gas Reduction Plan Update Project |
| **Lead Agency Name and Address:** | San Bernardino County Land Use Services Department<br>385 N. Arrowhead Avenue, 1st Floor<br>San Bernardino, California 92415 |
| **Contact Person and Phone Number:** | Karen Watkins, Planning Manager (909) 387-4218 |
| **Project Location:** | Throughout the County of San Bernardino (see Figure 1) |
| **Project Sponsor's Name and Address:** | San Bernardino County Land Use Services Department<br>385 N. Arrowhead Avenue, 1st Floor<br>San Bernardino, California 92415 |
| **Land Use (General Plan) Designation:** | Multiple (no change) |
| **Zoning Designation:** | Multiple (no change) |

## 1.2 BACKGROUND

In 2007, the County of San Bernardino (County) adopted a comprehensive General Plan Update and certified the Final Program Environmental Impact Report (EIR or General Plan EIR), State Clearinghouse (SCH) No. 2005101038. On the same day of adoption, the California Attorney General faxed a comment letter to the County stating the General Plan Update and General Plan EIR were inadequate because they did not address climate change. In 2007, the California Attorney General and San Bernardino County agreed to allow the General Plan Update to proceed if the County created a Greenhouse Gas Reduction Plan (GHGRP) and, once completed, amended the General Plan to include the GHGRP and associated Development Code Amendment that would implement the greenhouse gas (GHG) reductions within the GHGRP. In 2011, the County adopted the GHGRP and certified a Supplemental Program Environmental Impact Report (SEIR), SCH No. 2005101038. The primary purpose of the SEIR was to satisfy CEQA requirements by addressing the environmental effects specific to the proposed General Plan Amendment, GHGRP, and associated Development Code Amendment. The Final SEIR addressed the environmental effects of implementing the GHGRP in light of the previous environmental review in the 2007 General Plan Update as provided for under the California Environmental Quality Act (*CEQA) Guidelines* (Title 14 of the California Code of Regulations) Sections 15162 and 15163. The 2011 GHGRP established the County's sustainability and conservation measures based on its baseline inventory of GHG emissions from 2007 and developed a year 2020 GHG emissions reduction target of 15 percent below 2007 baseline levels in accordance with the State reduction goals in Assembly Bill (AB) 32. The emissions categories included in the GHG inventory include transportation, energy (electricity and natural gas), area sources, water, wastewater, solid waste, and agriculture.

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MILES

Source: County of San Bernardino

FIGURE 1
San Bernardino County Greenhouse Gas Reduction Plan Update 2021
Regional and Project Location

In October 2020, the County adopted an update to the 2007 General Plan known as the Countywide Plan – Policy Plan. As explained in this document, the County's update to the general plan provides similar and, in cases, superior policies designed to mitigate the effects previously identified in the General Plan EIR and SEIR. As further explained in this document, the adoption of the Countywide Plan – Policy Plan is not itself a subsequent action resulting in new significant impacts or increase the severity of previously identified significant impacts previously identified in the General Plan EIR and SEIR for purposes of providing an update to the GHGRP. In order to avoid confusion, all reference to General Plan or General Plan Policies for the 2020 GHGRP Updated Analysis below refer to the Countywide Plan – Policy Plan but are referred to herein as General Plan.

The County is updating the GHGRP (GHGRP Update) to integrate its past and current efforts with future efforts to reduce GHG emissions and promote sustainability in its operations and growth. To that end, the GHGRP Update considers the previous GHG reduction targets identified in the 2007 GHGRP and proposes new targets that are consistent with updates in State climate change regulations in order to meet the requirements of Senate Bill (SB) 32.

The GHGRP Update establishes a framework under which future projects would be designed for the purposes of reducing GHG emissions. Although the GHGRP Update is designed as a stand-alone GHG policy document, it would be utilized to provide a more comprehensive and detailed framework for land-based policy decisions to reduce GHG emissions from existing and future development. Any future projects proposed pursuant to the GHGRP Update would be developed in accordance with General Plan Policies for energy conservation while maximizing efficient use of resources, maintaining a high quality of life, enhancing job opportunities, promoting sustainability, and facilitating access to transportation facilities.

The GHGRP Update includes an update to the County's GHG inventory for the year 2016 and sets a target to reduce communitywide GHG emissions by 40 percent by 2030, which would put the County on a path toward the State's long-term goal to achieve statewide carbon neutrality (zero net emissions) by 2045. GHG reduction measures prescribed in the GHGRP Update build upon those adopted under the County's 2011 GHGRP to ensure that the County meets the reduction targets established pursuant to SB 32.

## 1.3 BASIS FOR AN ADDENDUM

The proposed changes set forth in the GHGRP Update are summarized in Section 2.0. Prior to approval of subsequent actions that constitute a "project" under CEQA, such as the GHGRP Update, the County is required to determine whether the environmental effects of such actions are within the scope of prior environmental analysis, or whether additional environmental analysis is required. That decision is influenced by whether the subsequent actions result in new significant impacts or increase the severity of previously identified significant impacts.

CEQA requires that the proposed GHGRP Update be reviewed to determine the environmental effects that would result if the project is approved and implemented. California Public Resources Code Section 21166 and *CEQA Guidelines* (Title 14 of the

California Code of Regulations) Sections 15162 and 15164 set forth the criteria for determining whether a subsequent EIR, subsequent negative declaration, addendum, or no further documentation be prepared in support of further agency action on the project. Pursuant to *CEQA Guidelines* Section 15162:

> *(a) When an EIR has been certified or negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:*
>
> *(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;*
>
> *(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or*
>
> *(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:*
>
> *(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;*
>
> *(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;*
>
> *(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or*
>
> *(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.*
>
> *(b) If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise, the lead agency shall determine whether to prepare a subsequent negative declaration, and addendum, or no further documentation.*

In determining whether an Addendum is the appropriate document to analyze the proposed GHGRP Update, *CEQA Guidelines* Section 15164 (Addendum to an EIR or Negative Declaration) states:

a) *The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.*

b) *An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.*

c) *An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.*

d) *The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.*

e) *A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's required findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.*

The County has evaluated the potential environmental impacts of the proposed GHGRP Update as set forth below in Section 4.0. The County, acting as the Lead Agency, has determined that none of the CEQA *Guidelines* Section 15162 conditions listed above applies. An Addendum to the prior environmental documentation (GHGRP SEIR) is appropriate for the proposed GHGRP Update, and an Addendum is appropriate for compliance with CEQA as described in the *CEQA Guidelines*. An Addendum does not need to be circulated for public review, but rather can be attached to the prior environmental documentation [*CEQA Guidelines* §15164(c)]. Prior to initiating the GHGRP Update, the County will consider this Addendum together with the previously certified EIR (GHGRP SEIR) and will make a decision regarding the GHGRP Update [*CEQA Guidelines* §15164(d)].

# SECTION 2.0 2020 GHGRP UPDATE PROJECT DESCRIPTION

## 2.1 LOCATION AND EXISTING USES

The GHGRP Update is an update to the County's 2011 GHGRP for implementation of updated GHG reduction measures throughout the County. No change to the County's existing land uses and zoning are proposed under the GHGRP Update. The GHGRP Update will instead be utilized to provide a more comprehensive and detailed framework for land-based policy decisions to reduce GHG emissions from existing and future development.

## 2.2 PROJECT CHARACTERISTICS

The GHGRP updates the previous GHG reduction targets identified in the 2011 GHGRP (i.e., Approved Project) in accordance with State policies in order to meet the requirements of SB 32. Whereas the existing GHGRP established a year 2020 GHG emissions reduction target of 15 percent below 2007 baseline levels in accordance with the State reduction goals in AB 32, the proposed GHGRP Update establishes a target to reduce communitywide GHG emissions by 40 percent by 2030. This goal would put the County on a path toward the State's long-term goal to achieve statewide carbon neutrality (zero net emissions) by 2045 per Executive Order B-55-18. Additionally, the GHGRP Update builds upon the countywide GHG reduction measures and proposes enhanced measures in order to achieve the updated reduction targets established pursuant to SB 32. Table A compares the 2011 GHGRP and GHGRP Update Measures as organized by source category (i.e., Energy Efficiency, On-Road Transportation, Solid Waste Management, Wastewater Treatment, and Water Consumption).

**Table A: 2020 GHGRP Update and 2011 GHGRP GHG Reduction Measures Comparison**

| 2020 GHGRP Update | 2007 GHGRP |
|---|---|
| **Energy Efficiency** | |
| Energy-10: Urban Tree Planting for Shading and Energy Savings | R2E1: Residential Energy Efficiency Retrofits<br>R2E2: Commercial Energy Efficiency Retrofits<br>R2E3: Residential Renewable Energy Incentives<br>R2E4: Warehouse Renewable Incentive Program<br>R2E5: Solar Hot Water Incentives<br>R2E6: New Residential Energy Efficiency<br>R2E7: New Commercial Energy Efficiency<br>R2E8: New Home Renewable Energy<br>R2E9: New Commercial/Industrial Renewable Energy<br>R2E10: Commercial/Industrial Rehabilitation/ Expansion Renewable Energy |

**Table A: 2020 GHGRP Update and 2011 GHGRP GHG Reduction Measures Comparison**

| 2020 GHGRP Update | 2007 GHGRP |
|---|---|
| **On-Road Transportation** | |
| On-Road-3: Transportation Demand Management and Signal Synchronization<br>On-Road-4: Expand Bike Routes | R2T1: Anti-Idling Enforcement Policy<br>R2T2: Employment-Based Trip and VMT Reductions Policy<br>R2T3: Revise Parking Policies<br>R2T4: Roadway Improvements including Signal Synchronization and Traffic Flow Management<br>R2T5: Expand Renewable Fuel/Low-Emission Vehicle Use<br>R2T6: Ridesharing and Carpooling<br>R2T7: Bicycle/Pedestrian Infrastructure and Promotion<br>R2T8: Construct High Occupancy Vehicle (HOV) Lanes |
| **Solid Waste Management** | |
| Waste-1: Waste Diversion and Reduction/Waste at Landfills | R2W1: Increase Methane Recovery at Mid-Valley, Milliken, and Colton Landfills<br>R2W2: Barstow Methane Recovery<br>R2W3: Landers Methane Recovery<br>R2W4: Comprehensive Disposal Site Diversion Program<br>R2W5: C & D Recycling Program<br>R2W6: County Diversion Programs<br>R2W7: City Diversion Programs |
| **Agriculture** | |
| | R1A1: Methane Capture at Large Dairies |
| **Water Consumption** | |
| Water-3: Water Efficient Landscaping Practices | R2WC1: Per Capita Water Use |

Sources: San Bernardino County Greenhouse Gas Reduction Plan. 20011
San Bernardino Greenhouse Gas Reduction Plan Update. 2021.

## 2.3 REGULATORY REQUIREMENTS, PERMITS, AND APPROVALS

The following discretionary approvals from the County will be required for this project:

- Addendum to the previously certified SEIR (GHGRP SEIR) pursuant to *CEQA Guidelines* Sections 15162 and 15164.
- Adoption of the GHGRP Update.

**IMPORTANT NOTE:** In the following analysis, each environmental topic is evaluated by first describing the impacts identified in the GHGRP SEIR ("*Approved Project Analysis*") and then an analysis of the proposed changes to the GHGRP ("*GHGRP Update Analysis*").

# SECTION 3.0 ENVIRONMENTAL DETERMINATION

## 3.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

| | | |
|---|---|---|
| ☐ Aesthetics | ☐ Greenhouse Gas Emissions | ☐ Population and Housing |
| ☐ Agriculture Resources | ☐ Hazards/Hazardous Materials | ☐ Public Services |
| ☐ Air Quality | ☐ Hydrology/Water Quality | ☐ Recreation |
| ☐ Biological Resources | ☐ Land Use and Planning | ☐ Transportation/Circulation |
| ☐ Cultural Resources | ☐ Mineral Resources | ☐ Utilities and Service Systems |
| ☐ Geology and Soils | ☐ Noise | ☐ Mandatory Findings of Significance |

## 3.2 DETERMINATION

On the basis of this initial evaluation:

I find that the Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

I find that although the project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. ☐

I find that the project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. ☐

I find that the project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required. ☒

| | |
|---|---|
| Signature | Date |
| Printed Name | Agency |

# SECTION 4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

## 4.1 AESTHETICS

Would the project:

| | | | | | |
|---|---|---|---|---|---|
| a) | Have a substantial adverse effect on a scenic vista? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.1.a) Approved Project Analysis.** New development facilitated under the GHGRP, such as renewable energy generation facilities and photovoltaic panel installation, could alter visual settings by developing large structures in areas considered scenic due to their heightened visibility. However, the visual impact of these facilities is addressed and mitigated through Development Code Chapters 83.02 (General Development and Use Standards – setback requirements and screening and buffering requirements that are intended to address land use compatibility), 83.06 (Fences, Hedges and Walls – aesthetic design of fences and walls that would likely be used to screen facilities), 83.07 (Glare and Outdoor Lights – illumination and light trespass standards that address impacts to nearby residential areas as well as public right-of-way), 83.10 (Landscape Standards – provision of landscape screening), Chapter 84.26 (Wind Energy Systems-Accessory – limit on wind generators, height, and siting to avoid visual impacts), and 84.29 (Renewable Energy Generation Facilities – setback, height, wind generator spacing, and special fencing standards to land use compatibility and visual effects). Through implementation of regulations, standards, and General Plan Policies, new development would be reduced but would not be mitigated to below a level of significance. Therefore, impacts on scenic vistas would be **significant and unavoidable**.

The Approved Project was determined to result in potential significant impacts pertaining to Aesthetics resources. As a result of these potentially significant impacts to Aesthetics resources in the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM AES-4** To improve access to scenic vistas, the County seeks to establish off-streets pull-outs at designated view points where appropriate along scenic highways.

**MM AES-5** The County desires to retain the scenic character of visually important roadways throughout the County. A "scenic route" is a roadway that has scenic vistas and other scenic and aesthetic qualities that over time have been found to have beauty to the County.

**2020 GHGRP Update Analysis.** Future development, under the 2020 GHGRP Update, could cause potential impacts to scenic views. Select strategies and measures proposed in the 2020 GHGRP Update designed to aid existing and future projects in reducing the County's GHG emissions could also result in changes to community aesthetics. Any future discretionary projects that would implement the GHG reduction measures outlined in the 2020 GHGRP Update would be subject to all applicable State and County regulations, development standards and design guidelines, and General Plan Policies (including the Renewable Energy and Conservation Element (RECE) policies) to prevent or minimize any potential impacts. Additionally, updated regulations and standards are prescribed to reduce the large-scale effect of renewable energy facilities on open spaces and scenic vistas and ensure compatibility of development in scenic settings. The SEIR determined that the Approved Project would result in significant impacts associated with the General Plan land use development and stated that new development would cause impacts that would be reduced by following regulations and mitigation measures but would not be mitigated to below a level of significance. However, implementation of the GHGRP Update does not propose new development. Although the GHGRP Update is designed as a stand-alone GHG policy document, it would be utilized to provide a more comprehensive and detailed framework for land-based policy decisions to reduce GHG emissions from existing and future development. The GHGRP Update proposes that new development is built in a way that is more energy efficient and reduces GHG emissions. With GHG reduction measures complying with existing regulations, standards, and General Plan Policies (including the RECE policies), the GHGRP Update would avoid or minimize potential impacts to scenic vistas. Therefore, impacts to scenic vistas from implementation of the 2020 GHGRP Update would be **less than significant.**

**Mitigation Measures**

The analysis provided in the certified SEIR of the Approved Project determined that Mitigation Measures AES 4 and 5 were to be implemented to reduce aesthetic impacts. These measures would not apply to the 2020 GHGRP Update because implementation would not produce potential impacts. Implementation of the 2020 GHGRP Update would not result in the requirement of any mitigation measures and the impact would be **less than significant.**

| | | | | | |
|---|---|---|---|---|---|
| b) | Substantially damage trees, rock outcroppings, and historic buildings within a State scenic highway? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.1.b) Approved Project Analysis.** Implementation of the GHGRP does not propose any new development that would damage scenic resources within a State scenic highway. Future discretionary projects would be required to be consistent with the General Plan Policies pertaining to land use, road improvements, and tree guidelines, along with the California Scenic Highway Program, prior to approval. Compliance with General Plan Policies would

ensure development facilitated under the GHGRP would not adversely affect scenic resources along State scenic highways. Therefore, impacts would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** Consistent with the Approved Project, new development facilitated under the 2020 GHGRP Update would not damage scenic resources within a State scenic highway. All future discretionary projects that would implement 2020 GHGRP Update GHG reduction measures such as renewable energy generation facilities would be subject to General Plan Policies pertaining to land use, road improvements, and tree preservation, as well as the California Scenic Highway Program. Compliance with General Plan Policies (including the RECE policies) would ensure implementation of the 2020 GHGRP Update would not adversely affect scenic resources along State scenic highways. Therefore, in the same manner as the Approved Project, impacts to scenic resources within a State scenic highway from implementation of the 2020 GHGRP Update would be remain **less than significant***.* No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

| | | | | | |
|---|---|---|---|---|---|
| c) | Substantially degrade the existing visual character or aesthetic quality of a site and its surroundings? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.1.c) Approved Project Analysis.** The County's overall visual character is a mix of urban, suburban, and rural land uses. Implementation of GHGRP reduction measures would consist of renewable energy facilities, and solar and photovoltaic panel installation. With GHG reduction measures, a substantial change in the character of the landscape would occur when open space, agricultural, and vacant land are developed into urban land uses. The GHGRP SEIR provides mitigated standards through the County's Development Code Chapters 83.02, 83.06, 83.07, 83.10, 84.26, and 84.29 that would help minimize impacts to visual resources. However, visual impacts from construction of renewable energy generating facilities on federal and State lands as well as along hillside and ridgelines would result in degradation of visual character or aesthetic quality.

Although development within the County is expected to result in a substantial change in the character of the landscape, compliance with existing regulations (Scenic Highway Program), as well as implementation of the applicable policies outlined in the County's General Plan, would help reduce impacts to the quality of the visual character throughout the County. Compliance with applicable regulations and policies, retrofits and new development would be

subject to standards designed to preserve the character of the County's natural open space, considerations for the maintenance of specific view corridors, and standards for development and building heights in order to prevent incompatible development in scenic areas. Even with compliance of regulations and standards, impacts would still be substantial and would not be mitigated to a level below significance. Therefore, impacts on visual character and aesthetic quality would be **significant and unavoidable**.

The Approved Project was determined to result in potential significant impacts pertaining to Aesthetics resources. As a result of these potentially significant impacts to Aesthetics resources in the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM AES-3** The County shall maintain and enhance the visual character of scenic routes in the County.

**MM AES-5** The County desires to retain the scenic character of visually important roadways throughout the County. A "scenic route" is a roadway that has scenic vistas and other scenic and aesthetic qualities that over time have been found to have beauty to the County.

**2020 GHGRP Update Analysis.** Future development under the 2020 GHGRP Update would be subject to regulations (Scenic Highway Program), as well as applicable mitigation outlined in the County's General Plan EIR and GHGRP SEIR to help avoid impacts to the quality of the visual character throughout the County. Development within the County is expected to result in substantial changes in visual character. Reduction measures proposed in the 2020 GHGRP Update to aid future projects in reducing the County's GHG emissions would result in changes in visual character. Even with compliance of regulations and standards, the SEIR stated that new development associated with the General Plan would cause impacts that would be substantial and would not be mitigated to a level below significance. However, implementation of the GHGRP Update would produce less than significant impacts related to visual character when complying with regulations, standards and General Plan Policies (including the RECE policies). Compliance with regulations would avoid or minimize potential impacts to visual character. Therefore, impacts on visual character and aesthetic quality would be **less than significant.**

### Mitigation Measures

The analysis provided in the certified SEIR of the Approved Project determined that Mitigation Measures AES 3 and 5 were to be implemented to reduce aesthetic impacts. These measures would not apply to the 2020 GHGRP Update because implementation would not produce significant impacts. Implementation of the 2020 GHGRP Update would not result in the requirement of any mitigation measures and the impact would be **less than significant.**

| | | | | | |
|---|---|---|---|---|---|
| d) | Create a new source of substantial light or glare, which would adversely affect daytime or nighttime views in the area? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.3.d) Approved Project Analysis.** The County consists of three regions: the Mountains, the Valley, and the Desert; most of the sources of substantial light and glare within these regions come from urban land uses. Implementation of the GHGRP such as solar photovoltaic panel installation would increase existing levels of light and glare, and extend areas affected by nighttime sky glow to include areas currently devoid of significant sources of light and glare.

Glare results from reflected light caused by sunlight or bright surfaces. Sensitive land uses would consist of residential communities and hospitals. The main potential sources of daytime glare would be from GHGRP reduction measure, solar photovoltaic panel installation along with renewable energy sources on existing buildings. However, there are no proposed GHG Plan reduction measures programmatically evaluated in the General Plan EIR that would substantially alter the amount of future artificial light in the County. Mitigation Measure 3.1.2 is prescribed to reduce daytime glare impacts by setting a development standard to prohibit off-site daytime glare impacts. Despite the imposition of a certain mitigation measure, the impact of new sources of light and glare resulting from implementation of the GHGRP SEIR could not be mitigated to below a level of significance. Even through compliance with State regulations, Nighttime Sky-Title 24 Outdoor lighting Standards, Development Code Chapters 83.02, 83.07, 83.10, and 84.29, and Mitigation Measure 3.1.2, impacts from new sources of substantial light or glare would be reduced but would not be mitigated to below a level of significance. Therefore, impacts would remain **significant and unavoidable.**

The Approved Project was determined to result in potential significant impacts pertaining to aesthetic resources. As a result of these potentially significant impacts to aesthetic resources, the SEIR for the Approved Project required implementation of the following mitigation measure:

**MM 3.1.2** Development Code Section 84.29.040 (Solar Energy Development Standards) shall be amended to include the following standard for glare:

- Solar energy facilities shall be designed to preclude daytime glare on any abutting residential land use zoning district, residential parcel, or public right-of-way.

**2020 GHGRP Update Analysis.** Implementation of the 2020 GHGRP Update would consist of new and enhanced reduction measures that would increase the amount of photovoltaic solar panels within the County. However, the latest versions of photovoltaic solar panels

absorb light eliminating glare. Implementation of the 2020 GHGRP Update would reduce the urban heat island effect and the County's dependence on energy sources that produce GHGs. Reduction measures associated with renewable energy generation would not cause substantial daytime glare. Implementation of the GHGRP Update would produce less than significant impacts related to light and glare when complying with regulations, Nighttime Sky-Title 24 Outdoor Lighting Standards and RECE policies, along with Countywide Plan Dark Skies Policy LU-4.7. Compliance with regulations would avoid or minimize potential impacts to light and glare. Therefore, impacts would be **less than significant.**

### Mitigation Measures

The analysis provided in the certified SEIR of the Approved Project determined that Mitigation Measure 3.1.2 was to be implemented to reduce aesthetic impacts. This measure would not apply to the 2020 GHGRP Update because implementation would not produce significant impacts. Implementation of the 2020 GHGRP Update would not result in the requirement of any mitigation measures and the impact would be **less than significant.**

### Conclusion and Findings for Aesthetic Resources

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated since the GHGRP SEIR of the Approved Project was certified in 2011.

- Would the 2020 GHGRP Update have a substantial adverse effect on a scenic vista?
- Would the 2020 GHGRP Update substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?
- In non-urbanized areas, would the 2020 GHGRP Update substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
- Would the 2020 GHGRP Update create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The conclusions verifying that an Addendum to the certified 2011 SEIR is the proper CEQA documentation for the 2020 GHGRP Update is presented below.

### No Substantial Project Revisions Requiring Major SEIR Revisions

Consequently, there are no substantial project revisions that would require substantial changes to the analysis or findings of the revisions to the certified 2011 SEIR of the Approved Project.

**No Substantial Change in the Physical Environment or Regulations Requiring Major SEIR Revisions**

There have been no substantial changes in the physical environment or in the regulations associated with aesthetics, light, and glare; thus, no substantial changes in the physical environment or regulations require major revision to the certified 2011 SEIR.

**No New Information Showing New or Substantially More Severe Significant Effects than in the Certified SEIR**

There is no new information showing new or substantially more severe significant effects on aesthetics, changes in visual character, light, and glare than in the certified 2011 SEIR. As such, no revisions to the certified 2011 SEIR are required.

**No Substantial Changes in the Mitigation Measures or Alternatives**

There are no substantial changes to the mitigation measures or alternatives approved in the certified 2011 SEIR relative to aesthetics, site and area visual character, and light/glare as part of the 2020 GHGRP Update.

## 4.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board.

Would the project:

| | | | | | |
|---|---|---|---|---|---|
| a) | Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Natural Resources Agency, to non-agricultural use? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.2.a) Approved Project Analysis.** As stated in the California Department of Conservation Land Use Conservation data, San Bernardino County contains approximately 14,089 acres of Prime Farmland, 6,747 acres of Farmland of Statewide Importance, 2,661 acres of Unique

Farmland, and 1,829 acres of Farmland of Local Importance. Implementation of the GHGRP, such as vehicle miles traveled (VMT) reduction strategies, and bicycle and pedestrian infrastructure and roadway improvements, including signal synchronization and traffic flow management, could potentially encroach into areas supporting agricultural production in the County. However, these reduction measures would involve the placement of improvements in existing developed areas. Additional reduction measures such as renewable energy generation would convert or cross agricultural lands. Wind and solar generating facilities are allowed in the Agriculture and Resource Conservation zone districts as provided in the Development Code under Chapter 84.29. These facilities could result in the substantial loss of agricultural lands, including important farmlands, as well as result in conflicts with existing agricultural operations. While implementation of Development Code Section 84.29.060 would require that renewable energy-generating facilities restore the land conditions in a manner that could be reutilized for agricultural uses, the extent of the operational life of these facilities may be substantial. Therefore, compliance with federal, State, and local regulations, along with General Plan Policies CO 6.3, CO 6.3 Program 2 and Mitigation Measure 3.2.1, would minimize impacts related to loss of agricultural land from renewable energy-generating facilities. Even though impacts would be minimized, impacts could not be mitigated to below a level of significance. Therefore, impacts would remain **significant and unavoidable.**

The Approved Project was determined to result in potential significant impacts pertaining to Agricultural resources. As a result of these potentially significant impacts to Agricultural resources in the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measure:

**MM 3.2.1** Work with transmission line providers and developers to design and cite supporting off-site facilities such as transmission lines, in a manner that will allow for continued use of adjoining agricultural operations.

**2020 GHGRP Update Analysis.** Although the Approved Project concluded impacts to farmland from implementation of the 2011 GHGRP SEIR would remain significant and unavoidable, reduction measures in accordance with the 2020 GHGRP Update would not produce significant impacts related to land use designations that would adversely affect Farmland. Implementation of the 2020 GHGRP Update would not result in any significant impacts following compliance with regulations and Countywide Plan Incentives Policy NR-7.3, which is equally effective as the policies citied in the approved project analysis. Therefore, impacts would be **less than significant.**

**Mitigation Measures.** The analysis provided in the certified SEIR of the Approved Project determined that Mitigation Measure 3.2.1 was to be implemented to reduce agricultural impacts. This measure would not apply to the 2020 GHGRP Update because implementation would not produce significant impacts. Implementation of the 2020 GHGRP Update would not result in the requirement of any mitigation measures and the impact would be **less than significant.**

| | | | | | |
|---|---|---|---|---|---|
| b) | Conflict with existing zoning for agricultural use or with a Williamson Act contract? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.2.b) Approved Project Analysis.** Implementation of the GHGRP could result in substantial conflicts with existing agricultural zoning, agricultural uses, and lands subject to a Williamson Act contract if future development is proposed in proximity to agricultural uses, which could result in urban uses. The Approved Project's growth would result in development such as renewable energy-generating facilities that would convert agricultural lands to urban uses. Future development accommodated by the GHGRP SEIR would result in significant conversion of agricultural lands to non-agricultural uses. Compliance with local regulations and General Plan Policies and Programs would help minimize this impact, but impacts would remain **significant and unavoidable.**

The Approved Project was determined to result in potential significant impacts pertaining to Agricultural resources. As a result of these potentially significant impacts to Agricultural resources in the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measure:

**MM AG-5** The County shall utilize the provisions of the Williamson Act to further the preservation of commercially viable agricultural open space and designated preserves on the Resource Overlay Maps.

**MM 3.2.1** Work with transmission line providers and developers to design and cite supporting off-site facilities such as transmission lines, in a manner that will allow for continued use of adjoining agricultural operations.

**2020 GHGRP Update Analysis.** Although the Approved Project concluded impacts that would remain significant and unavoidable, future development in accordance with the 2020 GHGRP Update does not change any of the County's land use designations that would otherwise adversely affect existing zoning and/or Williamson Act contracts. Therefore, the 2020 GHGRP Update would not result in any impacts to zoning for agricultural use or with existing Williamson Act contracts. Impacts would be **less than significant** and no mitigation is required.

### Mitigation Measures

The analysis provided in the certified SEIR of the Approved Project determined that Mitigation Measure AG-5 and 3.2.1 were to be implemented to reduce agricultural impacts. These measures would not apply to the 2020 GHGRP Update because implementation would not

produce significant impacts. Implementation of the 2020 GHGRP Update would not result in the requirement of any mitigation measures and the impact would be **less than significant.**

| | | | | | |
|---|---|---|---|---|---|
| c) | Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland to non-agricultural use? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.2.c) Approved Project Analysis.** Refer to Response to Checklist Question 4.2.a.

**2020 GHGRP Update Analysis.** Refer to Response to Checklist Question 4.2.a

| | | | | | |
|---|---|---|---|---|---|
| d) | Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104 (g))? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.2.d) Approved Project Analysis.** The General Plan EIR did not evaluate potential physical environmental effects to forest lands resulting from implementation of the General Plan as such provisions of Appendix G did not exist at the time the General Plan EIR was prepared. The Mountain Region of San Bernardino County contains the majority of the County's forest land. Implementation of the GHGRP would include reduction measures such as VMT reduction, bicycle and pedestrian infrastructure, and roadway improvements, including signal synchronization and traffic flow management, which could potentially encroach into forest areas, but these improvements would be in existing urban and developed areas. It is unlikely for renewable energy facilities to be built in forest land since it is not an area identified for wind, solar, or geothermal energy generation based on California Energy Commission's California Wind Resource Potential Map. Even though impacts to forest land are unlikely, the General Plan includes policies and programs (M/OS 1.2, 1.6, M/LU 1.20, M/CO 1.7, and 2.3) that would address potential impacts to forest land. Compliance with General Plan Policies and Programs and Development Code Chapter 82.19 and 83.10 also would address any potential impacts to forest lands. Since forest lands are not located in areas identified for wind, solar, or geothermal energy generation, implementation of the GHGRP would not affect forest land. Therefore, **no impacts** would occur.

**2020 GHGRP Update Analysis.** Implementation of the 2020 GHGRP Update would not conflict with forest land, timberland, or land zoned for timberland production. In the same manner as the Approved Project, **no impact** would occur and no mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

| | | | | | |
|---|---|---|---|---|---|
| e) | Would the project result in the loss of forest land or conversion of forest land to non-forest use? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.2.e) Approved Project Analysis.** The General Plan EIR did not evaluate potential physical environmental effects to forest lands resulting from implementation of the General Plan as such provisions of Appendix G did not exist at the time the General Plan EIR was prepared. Implementation of the Approved Project would not result in the loss of forest land. **No impact** would occur and no mitigation was required.

**2020 GHGRP Update Analysis.** Implementation of the 2020 GHGRP Update would not result in the loss of forest land because implementation of the 2020 GHGRP Update would not interfere with any forest lands in the County. In the same manner as the Approved Project, **no impact** would occur and no mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

| | | | | | |
|---|---|---|---|---|---|
| e) | Involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.2.f) Approved Project Analysis.** The General Plan EIR did not evaluate potential physical environmental effects to forest lands resulting from implementation of the General Plan as such provisions of Appendix G did not exist at the time the General Plan EIR was prepared.

Implementation of the GHGRP would include development of renewable energy facilities as part of existing development, but would not be in the proximity of any forest land areas in the County with the exception of the addition of solar panels to existing structures in the mountain areas. The addition of solar panels to existing structures would not convert forest land to non-forest use. Therefore, conversion of forest land to non-forest use would not occur. **No impact** would occur and no mitigation was required.

**2020 GHGRP Update Analysis.** Future development in accordance with the 2020 GHGRP Update will continue to consist of renewable energy sources within existing development but would not be in the proximity of forest land. Consistent with the Approved Project, these renewable energy sources would be implemented in agricultural land use contexts but would not result in conversion of forest land to non-forest uses. In the same manner as the Approved Project, **no impact** would occur and no mitigation is required.

### Mitigation Measures

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

### Conclusion and Findings for Agricultural Resources

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated since the SEIR of the Approved Project was certified in 2011.

- Would the 2020 GHGRP Update convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Natural Resources Agency, to non-agricultural use?
- Would the 2020 GHGRP Update conflict with existing zoning for agricultural use or with a Williamson Act contract?

The conclusions verifying that an Addendum to the certified 2011 EIR is the proper CEQA documentation for the 2020 GHGRP Update are presented below.

### No Substantial Project Revisions Requiring Major SEIR Revisions

There are no substantial project revisions that would require substantial changes to the analysis or findings of the revisions to the certified 2011 SEIR of the Approved Project.

### No Substantial Change in the Physical Environment or Regulations Requiring Major SEIR Revisions

There have been no substantial changes in the physical environment or in the regulations associated with agriculture and forest resources; thus, no substantial changes in the physical environment or regulations require major revision to the certified 2011 SEIR.

**No New Information Showing New or Substantially More Severe Significant Effects than in the Certified SEIR**

There is no new information showing new or substantially more severe significant effects on agricultural and forest resources than in the certified 2011 SEIR. As such, no revisions to the certified 2011 SEIR are required.

**No Substantial Changes in the Mitigation Measures or Alternatives**

There are no substantial changes to the mitigation measures or alternatives approved in the certified 2011 SEIR relative to agricultural and forest resources.

## 4.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

| | | | | | |
|---|---|---|---|---|---|
| a) | Conflict with or obstruct implementation of the applicable air quality plan? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.3.a) Approved Project Analysis.** The County of San Bernardino is located within the jurisdiction of two air quality management districts, the South Coast Air Quality Management District (SCAQMD) and the Mojave Desert Air Quality Management District (MDAQMD). The GHGRP SEIR addressed consistency with the SCAQMD's 2003 Air Quality Management Plan (2003 AQMP) and MDAQMD guidelines. To be consistent with the AQMP, a project would be consistent with the goals, objectives, and assumptions in the respective plan to achieve the federal and State air quality standards. For a project to be consistent with the AQMP adopted by the SCAQMD, the pollutants emitted from the project should not exceed the SCAQMD daily threshold or cause a significant impact on air quality, or the project must already have been included in the AQMP projections.

The General Plan EIR concluded that, with implementation of and compliance with federal, State, and local regulatory programs, General Plan policies, as well as EIR Mitigation Measures AQ-1, 3, 8, and 9, air pollutant emissions from future development would be reduced but still exceed regulatory thresholds. Exceedance of regulatory thresholds would conflict with the implementation of the applicable air quality plans. Implementation of GHGRP reduction measures would provide additional reductions in criteria air pollutants; however, mitigation measures could not mitigate impacts to a level of below significance. The impact was determined to be **significant and unavoidable.**

The Approved Project was determined to result in potential significant impacts pertaining to air quality resources; as a result, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM AQ-1** Because development during construction would be subjected to wind hazards (due to increased dust, the removal of wind breaks, and other factors), the County shall require either as mitigation measures in the appropriate environmental analysis required by the County for the development proposal or as conditions of approval if no environmental document is required, that developments in areas identified as susceptible to wind hazards to address site-specific analysis of: Grading restrictions and/or controls on the basis of soil types, topography or season; landscaping methods, plant varieties and scheduling to maximize successful revegetation; and dust control.

**MM AQ-3** The County shall locate and design new development in a manner that will minimize direct and indirect emissions of air contaminants through such means as:

- Promoting mixed-use development to reduce the length and frequency of vehicle trips;
- Providing for increased intensity of development along existing and proposed transit corridors; and
- Providing for the location of ancillary employee services (including but not limited to child care, restaurants, banking facilities, convenience markets) at major employment centers for the purpose of reducing midday vehicle trips.

**MM AQ-8** The County shall require the use of building materials and coatings that minimize air pollution consistent with the requirements of the AQMD.

**MM AQ-9** The County shall provide incentives to promote siting or use of clean air technologies (e.g., fuel cell technologies, renewable energy sources, UV coatings, and hydrogen fuel).

**2020 GHGRP Update Analysis.** The current regional AQMP is the Final AQMP adopted by the SCAQMD on March 10, 2017. The Final 2016 AQMP proposes policies and measures currently contemplated by responsible agencies to achieve federal and State standards for healthful air quality. The 2020 GHGRP Update reduction measures are in continuation of the Approved GHGRP measures that will further contribute to reducing GHG emissions within the County. The enhanced GHG reduction measures are expected to result in fewer vehicle miles traveled, energy savings, and correspondingly more reductions in criteria pollutant emissions than originally anticipated in the GHGRP SEIR.

Consistent with the Approved Project, the 2020 GHGRP Update would implement Mitigation Measures AQ-1, 3, 8, and 9, as prescribed in the General Plan EIR, to ensure the implementation of GHG reduction measures and help reduce emissions of criteria pollutants from implementation of future development. Therefore, emissions resulting from

implementation of the 2020 GHGRP Update would not themselves create any significant impact, as implementation of GHG reduction measures identified in the GHGRP Update would result in minimized or avoided impacts on air quality. Therefore, impacts would be **less than significant with mitigation incorporated.**

**Mitigation Measures**

The analysis provided in the certified SEIR of the Approved Project determined that Mitigation Measures AQ-1, 3, 8, and 9 were to be implemented to reduce Air Quality impacts. These measures would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures and the impact would be **less than significant with mitigation incorporated**.

| | | | | | |
|---|---|---|---|---|---|
| b) | Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.3.b) Approved Project Analysis.** Implementation of the GHGRP SEIR consists of energy efficiency retrofits, renewable energy, and VMT reduction that would result in temporary emissions of air pollutants. Short-term construction impacts would be temporary and would be an offset for the overall reduction in criteria air pollutant emissions. As for long-term impacts, vehicular source emissions were modeled using the California Emissions Estimator Model (CalEEMod) and based on General Plan land use types and sizes, anticipated increases in trip generation, and default settings and County location. CalEEMod accounts for area source emissions from the use of natural gas, fireplaces, and consumer products, as well as vehicle trip emissions.

Compliance with federal, State, and local regulations and General Plan Policies, adherence to SCAQMD and MDAQMD rules and regulations would help reduce emissions of criteria pollutants during operation of future projects facilitated through implementation of the General Plan and GHGRP SEIR. Therefore, impacts would be **less than significant.** No mitigation was required.

**2020 GHGRP Update Analysis.** The proposed changes in the 2020 GHGRP Update include enhanced GHG reduction measures compared to the 2011 GHGRP. Implementation of the 2020 GHGRP Update would not increase VMT. Compared to the Approved Project, the 2020 GHGRP Update would further decrease VMT, thereby improving air quality. The 2020 GHGRP Update implementation would further reduce reliance on traditional, more polluting forms of energy by increasing use of cleaner, alternative energy sources.

In the same manner as the Approved Project, the 2020 GHGRP Update would be consistent with updated Countywide Plan Air Quality Policies NR-1.3, 1.8 and 1.9, SCAQMD and MDAQMD standards and regulations to help reduce emissions of criteria pollutants from implementation of future development. Therefore, air quality impacts associated with 2020 GHGRP Update would not be significant. Thus, impacts would be **less than significant**.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

| | | | | | |
|---|---|---|---|---|---|
| c) | Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under applicable federal or state ambient air quality standard? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.5.c) Approved Project Analysis.** As described in Response to Checklist Questions 4.5.a and 4.5.b, above, General Plan Policies, adherence to SCAQMD rules and regulations, and implementation of Mitigation Measures AQ-1, 3, 8 and 9 would reduce construction and operation-related air quality impacts. However, even with these mitigation measures, future construction and operational emissions would likely exceed SCAQMD and MDAQMD thresholds. The impact was determined to be **significant and unavoidable**.

The Approved Project was determined to result in potential significant impacts pertaining to air quality resources; as a result, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM AQ-1** Because development during construction would be subjected to wind hazards (due to increased dust, the removal of wind breaks, and other factors), the County shall require either as mitigation measures in the appropriate environmental analysis required by the County for the development proposal or as conditions of approval if no environmental document is required, that developments in areas identified as susceptible to wind hazards to address site-specific analysis of: Grading restrictions and/or controls on the basis of soil types, topography or season; landscaping methods, plant varieties and scheduling to maximize successful revegetation; and dust control.

**MM AQ-3** The County shall locate and design new development in a manner that will minimize direct and indirect emissions of air contaminants through such means as:

- Promoting mixed-use development to reduce the length and frequency of vehicle trips;

- Providing for increased intensity of development along existing and proposed transit corridors; and
- Providing for the location of ancillary employee services (including but not limited to child care, restaurants, banking facilities, convenience markets) at major employment centers for the purpose of reducing midday vehicle trips.

**MM AQ-8** The County shall require the use of building materials and coatings that minimize air pollution consistent with the requirements of the AQMD.

**MM AQ-9** The County shall provide incentives to promote siting or use of clean air technologies (e.g., fuel cell technologies, renewable energy sources, UV coatings, and hydrogen fuel).

**2020 GHGRP Analysis.** Changes in the GHGRP Update include new and enhanced GHG reduction measures compared to the 2011 GHGRP. The purpose of the GHGRP Update is to reduce GHG emissions further. In the process of reducing GHG emissions, the GHGRP Update also reduces criteria pollutants further. The GHGRP Update would implement existing Mitigation Measures, as prescribed in the General Plan EIR and GHGRP SEIR, to ensure the implementation of GHG reduction measures and help reduce emissions of criteria pollutants from implementation of future development. Therefore, cumulative air quality impacts associated with the 2020 GHGRP Update would not themselves be significant. Therefore, impacts would be **less than significant with mitigation incorporated.**

**Mitigation Measures**

The analysis provided in the certified SEIR of the Approved Project determined that Mitigation Measures AQ-1, 3, 8 and 9 were to be implemented to reduce Air Quality impacts. These measures would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures and cumulative impacts to air quality would be **less than significant with mitigation incorporated.**

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| d) | Expose sensitive receptors to substantial pollutant concentrations? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.3.d) Approved Project Analysis.** As described in response to Checklist Questions 4.5.a and 4.5.b, above, the existing policies and programs to implement and comply with SCAQMD and MDAQMD rules would reduce construction and operation impacts. However, the project would result in the future development of numerous projects each contributing incrementally to air pollutant emissions affecting sensitive receptors. Exposure of sensitive receptors to

emissions of substantial concentrations of criteria air pollutants and precursors would be a significant impact and mitigation was identified.

Compliance with federal, State, and local regulations and General Plan Policies and Mitigation Measures AQ-3 and 8 would reduce impacts by reducing air pollutant emissions from stationary and mobile sources. Therefore, impacts would be **less than significant with mitigation incorporated.**

The Approved Project was determined to result in potential significant impacts pertaining to air quality resources; as a result, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM AQ-3** The County shall locate and design new development in a manner that will minimize direct and indirect emissions of air contaminants through such means as:

- Promoting mixed-use development to reduce the length and frequency of vehicle trips;
- Providing for increased intensity of development along existing and proposed transit corridors; and
- Providing for the location of ancillary employee services (including but not limited to child care, restaurants, banking facilities, convenience markets) at major employment centers for the purpose of reducing midday vehicle trips.

**MM AQ-8** The County shall require the use of building materials and coatings that minimize air pollution consistent with the requirements of the AQMD.

**2020 GHGRP Update Analysis.** Implementation of the 2020 GHGRP Update would not involve large internal combustion equipment that would contribute substantial air pollutant emissions that could affect sensitive receptors. Implementation of the 2020 GHGRP Update would not add any new vehicle trips or increase VMT. Compared to the Approved Project, the 2020 GHGRP Update would further decrease VMT, thereby improving air quality. The 2020 GHGRP Update implementation would further reduce air pollutant emissions by increasing use of cleaner, alternative energy sources. The change in energy sources would reduce emissions associated with energy production.

The 2020 GHGRP Update would be consistent with federal, State, and local regulations, Countywide Plan Air Quality policies NR-1.1 and 1.5, SCAQMD and MDAQMD regulations and guidelines, and Mitigation Measures AQ-3 and AQ-8 to help reduce emissions of toxic air contaminants from implementation of future development. Therefore, pollutant impacts to sensitive receptors from implementation of the 2020 GHGRP Update would be **less than significant with mitigation incorporated.**

**Mitigation Measures**

The analysis provided in the certified SEIR of the Approved Project determined that Mitigation Measures AQ-3 and AQ-8 were to be implemented to reduce Air Quality impacts. These measures would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

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| e) Create objectionable odors affecting a substantial number of people? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | ☐ | ☐ | ☒ | ☐ |

**4.3.e) Approved Project Analysis.** SCAQMD Rule 402 (Nuisance), Rule 410 (odors from transfer stations and material recovery stations) and Rule 1179 (Public owned treatment works operations) place conditions and compliance measures for odor emissions from the identified sources in order to reduce exposure to the surrounding area. Implementation of and compliance with the regulatory programs and General Plan Policies would ensure that future development accommodated by the GHGRP SEIR would have **less than significant** odor impacts. No mitigation was required.

**2020 GHGRP Update Analysis.** The 2020 GHGRP Update does not propose strategies or measures that would directly or indirectly result in the creation of objectionable odors. Implementation of 2020 GHGRP Update would include an increase of energy savings and VMT reduction, all of which would be subject to SCAQMD rules and Countywide Plan Agricultural Operations Policy HZ-2.10 to minimize objectionable odors. The 2020 GHGRP Update does not include projects that would generate odors. Therefore, implementation of the 2020 GHGRP Update would not create objectionable odors, meaning impacts would be **less than significant.** No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

**Conclusion and Findings for Air Quality**

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated since the SEIR of the Approved Project was certified in 2011.

- Would the 2020 GHGRP Update conflict with or obstruct implementation of the applicable air quality plan?

- Would the 2020 GHGRP Update violate any air quality standard or contribute substantially to an existing or projected air quality violation?
- Would the 2020 GHGRP Update result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under applicable federal or State ambient air quality standard?
- Would the 2020 GHGRP Update expose sensitive receptors to substantial pollutant concentrations?
- Would the 2020 GHGRP Update result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Air Quality impacts pertaining to the 2020 GHGRP Update would be equal to or less than those of the Approved Project that was concluded in the certified 2011 SEIR. The conclusions verifying that an Addendum to the certified 2011 SEIR is the proper CEQA documentation for the 2020 SEIR Update are presented below.

**No Substantial Project Revisions Requiring Major EIR Revisions**

The 2020 GHGRP Update would have no impacts on air quality, which is the same as the Approved Project. Consequently, there are no substantial project revisions that would require substantial changes to the analysis or findings of the revisions to the certified 2011 SEIR of the Approved Project.

**No Substantial Change in the Physical Environment or Regulations Requiring Major EIR Revisions**

There have been no substantial changes in the physical environment or in the regulations associated with air quality; thus, no substantial changes in the physical environment or regulations require major revision to the certified 2011 SEIR.

**No New Information Showing New or Substantially More Severe Significant Effects than in the Certified EIR**

There is no new information showing new or substantially more severe significant effects on air quality than in the certified 2011 SEIR. As such, no revisions to the certified 2011 SEIR are required.

**No Substantial Changes in the Mitigation Measures or Alternatives**

There are no substantial changes to the mitigation measures or alternatives approved in the certified 2011 SEIR relative to air quality.

## 4.4 BIOLOGICAL RESOURCES

Would the project:

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| a) | Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.4.a) Approved Project Analysis.** The County has a variety of plant and wildlife species and potential impacts could affect riparian or other sensitive habitats in various areas within the County. Implementation of the Approved Project would increase renewable energy sources and expand existing facilities in urbanized and developed areas and would steer away from vegetation or wildlife removal as much as possible. Therefore, improvements from renewable energy sources would not be expected to adversely affect important biological habitats within the County.

However, additional reduction measures, such as VMT reduction, bicycle/pedestrian infrastructure, and roadway improvements could permanently alter natural areas, result in removal of trees and vegetation, and affect federal, State, and locally protected habitats or species. In addition, these improvements could possibly create barriers to wildlife movement in wildlife corridors including creek channels in the County. Some GHG reduction measures (e.g., bikeway and pedestrian pathways) could increase human activity and therefore increase conflicts with sensitive plant and wildlife species. Furthermore, there is a chance that structures would interfere with migratory movements and may provide perch sites for raptors, which would increase predatory levels toward juvenile desert tortoises by ravens. Future development accommodated by the GHGRP SEIR, would be considered pursuant to CEQA on a case-by-case basis following submittal of a specific development proposal. Regulatory provisions, such as Policy CO 2.3, 2.4, and CO 2.4 Program 3, are consistent with the California Air Resources Board's Functional Equivalent Document for Renewable Electricity Standard Projects. These policies and programs would monitor and minimize impacts related to reduction measures. However, even with regulations assistance and reduction measures, renewable energy generation would substantially increase impacts. Mitigation Measures MM 3.4.1a and 3.4.1b would assist in mitigating such impacts but would not be able to mitigate impacts below a level of significance.

After compliance with requirements of the Federal and California Endangered Species Acts (FESA and CESA), including requirements of the United States Fish and Wildlife Service (USFWS) regarding critical habitat, implementation of the proposed GHGRP would still have substantial adverse impacts on sensitive animal species and habitats. Therefore, impacts would remain **significant and unavoidable**.

The Approved Project was determined to result in potential significant impacts pertaining to Biological Resources. As a result of these potentially significant impacts to biological resources in the area, the GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM-3.4.1a** Development Code Chapter 84.29 (Renewable Energy Generation Facilities) shall be amended to include the following standard for transmission line design:

- Transmission lines and all electrical components shall be designed, installed, and maintained to reduce the likelihood of large bird electrocutions and collisions.

**MM-3.4.1b** Development Code Chapter 84.29.030 (Wind Energy Development standards) shall be amended to include the following standard:

- The design of wind energy facilities will discourage the use of the site by avian species (provision of landscaping and ground conditions that are unattractive to avian species).
- Design and siting of wind turbines associated with lighting, avoidance placement of turbines on or immediately adjacent to the upwind side of ridge crests, and other design features to minimize impacts to bat and avian species.
- Provision of an avian and bat management plan that includes mortality monitoring and additional measures to address unanticipated significant adverse impacts on the population of avian or bat species or with any migratory corridor.

**2020 GHGRP Update Analysis.** Implementation of the 2020 GHGRP Update of GHG reduction measures must be developed consistent with all applicable regulatory policies, FESA and CESA, Resource Management Plan, and Countywide Plan – Policy Plan Policies to protect riparian habitats and sensitive natural communities. Any future projects proposed pursuant to the 2020 GHGRP Update would be developed in accordance with the updated General Plan, which is now called the Countywide Plan Biological Resources Policies NR-5.1 and 5.7 for habitat conservation while maximizing efficient use of energy resources and promoting sustainability.

If future projects facilitated under the 2020 GHGRP Update occur on sites containing riparian habitats and sensitive natural communities, projects would be required in accordance with regulatory policies to ensure potential impacts would be minimized or avoided. Therefore, impacts would be **less than significant with mitigation incorporated**.

### Mitigation Measures

The analysis provided in the certified GP EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measures 3.4.1a and 3.4.1b were implemented to reduce impacts to biological resources. These measures would also be implemented by the 2020 GHGRP

Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures and impacts would remain less than significant with mitigation incorporated.

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| b) | Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.4.b) Approved Project Analysis.** Implementation of the Approved Project would include GHG reduction measures, such as bicycle paths or traffic efficiency improvements along riparian corridors, which would result in direct (disturbance of riparian flora and fauna) and indirect impacts (erosion and sedimentation).

As stated in the GHGRP SEIR, direct and growth-inducing impacts determined to cause a significant adverse effect on rare, threatened, or endangered desert species, many of which exist in riparian and/or wetland habitats, shall be mitigated by avoidance, habitat restoration, or compensated by off-site mitigation and evaluated through a project-level EIR. These regulatory provisions are consistent with recognized mitigation measures highlighted in the California Air Resources Board's Functional Equivalent Document for Renewable Electricity Standard (CARB 2010f), which addresses impacts resulting from future renewable electricity standard projects. The proposed project would be subject to these County provisions. Furthermore, future development would be required to coordinate with the USFWS and/or CDFW and comply with regulations regarding potential impacts to sensitive species.

The Federal Clean Water Act (CWA), Section 404, and California Fish and Game Code are regulatory policies designed to protect riparian and/or sensitive natural communities. Future projects would be required to comply with applicable federal, State, and local regulations, as well as General Plan Policy CO 2.4. With implementation of and compliance with applicable regulations, habitat conservation plans, and General Plan Policies, impacts to riparian and sensitive natural communities would be reduced but not mitigated below a level of significance. Therefore, impacts would remain **significant and unavoidable**.

The Approved Project was determined to result in potential significant impacts pertaining to Biological Resources. As a result of these potentially significant impacts to biological resources in the area, the GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM-BIO-4** The County shall participate with Regional plans to improve water quality and habitat that are downstream but may be beyond County limits. The County shall coordinate with Regional plans to minimize degradation of water quality within the County that affects downstream resources and habitats.

**MM-3.4.1a** Development Code Chapter 84.29 (Renewable Energy Generation Facilities) shall be amended to include the following standard for transmission line design:

- Transmission lines and all electrical components shall be designed, installed, and maintained to reduce the likelihood of large bird electrocutions and collisions.

**MM-3.4.1b** Development Code Chapter 84.29.030 (Wind Energy Development standards) shall be amended to include the following standard:

- The design of wind energy facilities will discourage the use of the site by avian species (provision of landscaping and ground conditions that are unattractive to avian species).
- Design and siting of wind turbines associated with lighting, avoidance placement of turbines on or immediately adjacent to the upwind side of ridge crests, and other design features to minimize impacts to bat and avian species.
- Provision of an avian and bat management plan that includes mortality monitoring and additional measures to address unanticipated significant adverse impacts on the population of avian or bat species or with any migratory corridor.

**2020 GHGRP Update Analysis.** Implementation of the 2020 GHGRP Update must be developed consistent with all applicable regulatory policies, habitat conservation plans, and the updated General Plan, which is now called the Countywide Plan– Policy Plan Biological Resources Policies NR-5.1 and 5.7 related to riparian and/or sensitive natural communities with or without implementation of the 2020 GHGRP Update. Any future projects proposed pursuant to the 2020 GHGRP Update would be developed in accordance with Countywide Plan Policies for riparian and/or sensitive natural communities' protection.

If future projects facilitated under the 2020 GHGRP Update occur on sites containing riparian and/or sensitive natural communities, they would be required to comply with regulations and mitigation measures to ensure impacts would be reduced or avoided. Therefore, future development implemented in accordance with the 2020 GHGRP Update would be **less than significant with mitigation incorporated.**

### Mitigation Measures

The analysis provided in the certified General Plan EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measures Bio-4, 3.4.1a and 3.4.1b were implemented to reduce impacts to biological resources. These measures would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures and impacts would remain less than significant with mitigation incorporated.

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| c) | Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.4.c) Approved Project Analysis.** Implementation of the Approved Project would include energy efficiency standards and energy efficiency retrofits. These measures would involve expansion of existing facilities in urbanized or developed areas but these improvements would not adversely affect any federally protected wetlands through construction activities. However, reduction GHG measures such as bicycle paths or traffic efficiency improvements along riparian corridors or wetlands that are associated with the Mojave River would result in direct (disturbance of riparian or wetland flora and fauna) and indirect impacts (erosion and sedimentation), which would adversely affect downstream water quality and species that inhabit such areas, such as amphibians, songbirds, fish, and raptors. Disturbance within any water of the U.S. would require a CWA Section 404 permit from the U.S. Army Corps of Engineers (USACE), which would place certain requirements for avoidance of such impacts. In addition, preparation and implementation of the Storm Water Pollution Prevention Plans (SWPPPs) required under Section 401 of the CWA would alleviate potential indirect impacts relating to increased erosion, sedimentation, and runoff.

Any potential impacts to wetlands would be addressed through federal, State, and local regulations, General Plan Policies M/CO 1.7, M/CO 3.6, CO 2.4, and CO 2.4 Program 3 and would need approval by the CDFW through Streambed Alteration Agreements, if applicable. In accordance with these regulations and policies, any evaluations of federally protected wetlands would be required to comply with Sections 401, 402 and 404 of the CWA. Even with implementation with policies and regulations, impacts would not be able to be mitigated to a level below significance. Therefore, compliance with the CWA, California Fish and Game Code, and General Plan Policies would reduce impacts related to federally protected wetlands but would remain **significant and unavoidable**.

The Approved Project was determined to result in potential significant impacts pertaining to Biological Resources. As a result of these potentially significant impacts to biological resources in the area, the GHGRP EIR for the Approved Project required implementation of the following mitigation measures:

**MM-BIO-4** The County shall participate with Regional plans to improve water quality and habitat that are downstream but may be beyond County limits. The County shall coordinate with Regional plans to minimize degradation of water quality within the County that affects downstream resources and habitats.

**2020 GHGRP Update Analysis.** Implementation of the 2020 GHGRP Update could impact wetland and riparian habitat within the County. To minimize such impacts, projects developed

as a result of implementation of the 2020 GHGRP Update must be developed and implemented consistent with all applicable regulatory policies, habitat conservation plans, and the updated General Plan, which is now called the Countywide Plan - Policy Plan Policies designed to protect federally protected wetlands. If future projects facilitated under the 2020 GHGRP Update occur on sites containing federally protected wetlands, they would be subject to approval by the US. Fish and Wildlife Service (USFWS) and U.S. Army Corps of Engineers (USACE). In accordance with these regulations and policies, any evaluations of federally protected wetlands would be required to comply with CWA Sections 401, 402, and 404. Stated in the SEIR, compliance with the CWA, California Fish and Game Code, and Countywide Plan Policies would ensure impacts would not occur, but impacts cannot be mitigated to a level below significance. However, implementation of the 2020 GHGRP would not produce any significant impacts towards federal protected wetlands. Therefore, potential impacts regarding federally protected wetlands would be **less than significant.**

**Mitigation Measures**

The analysis provided in the certified SEIR of the Approved Project determined that Mitigation Measure BIO-4 was to be implemented to reduce biological impacts. This measure would not apply to the 2020 GHGRP Update because implementation would not produce significant impacts. Implementation of the 2020 GHGRP Update would not result in the requirement of any mitigation measures and the impact would be **less than significant.**

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| d) | Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.4.d) Approved Project Analysis.** Implementation of the GHGRP SEIR would increase urban uses in the County, affecting the movement and migration of wildlife species, as well as wildlife corridors and the use of native wildlife nursery sites. Direct impacts to nursery sites would include removal of habitat to accommodate land development and infrastructure. Indirect impacts may result from noise, lighting, and changes in drainage patterns, and introduction of pests or domestic animals. The Multiple Species Habitat Conservation Plan is designed by State and federal permitting authorities to require adequate buffer zones and implementation of site design principles to minimize indirect impacts that could result from noise, lighting, changes in drainage patterns, and/or introduction of pests or domestic animals. Impacts to movement and migration of wildlife species, wildlife corridors, and the use of native wildlife nursery sites would be addressed through federal, State, and County regulations, multiple species habitat conservation plans, and General Plan Policies. Compliance with the Migratory Bird Treaty Act, CESA, CWA, California Fish and Game Code,

multiple species habitat conservation plans, and General Plan Policies would reduce impacts to movement and migration of wildlife species, wildlife corridors, and the use of native wildlife nursery sites; however, impacts would not be fully avoided to a level below significance. Therefore, impacts would remain **significant and unavoidable.**

The Approved Project was determined to result in potential significant impacts pertaining to Biological Resources. As a result of these potentially significant impacts to biological resources in the area, the GHGRP EIR for the Approved Project required implementation of the following mitigation measures:

**MM-BIO-9** The County shall coordinate with state and federal agencies and departments to ensure that their programs to preserve rare and endangered species and protect areas of special habitat value, as well as conserve populations and habitats of commonly occurring species, are reflected in reviews and approvals of development programs. This coordination shall be accomplished by notification of development applications and through distribution of CEQA documents.

**MM-BIO-11** In addition to conditions of approval that may be required for specific future development proposals in the County, the County shall establish long term comprehensive plans for the County's role in the protection of native species because preservation and conservation of biological resources are statewide, Regional, and local issues that directly affect development rights.

**2020 GHGRP Update Analysis.** Projects implemented through the 2020 GHGRP Update must be developed consistent with all applicable regulatory policies and Countywide Plan Policies, which are designed to protect movement and migration of wildlife species, wildlife corridors, and the use of native wildlife nursery sites. Any future projects proposed pursuant to the 2020 GHGRP Update would be developed in accordance with General Plan Policies for protection of wildlife migration, corridor, and nursery sites while maximizing efficient use of energy resources within the County. The SEIR took the significant impacts associated with the General Plan and stated that new development would cause impacts that would be reduced by following regulations and mitigation measures but would not be mitigated to below a level of significance. However, implementation of the GHGRP Update would not produce any impacts regarding this resource. With GHG reduction measures complying with regulations, standards, and Countywide Plan Policies which are equally effective as policies cited in the Approved Analysis, would avoid or minimize potential impacts. Therefore, impacts related to wildlife migration corridors and nursery sites would be **less than significant.**

### Mitigation Measures

The analysis provided in the certified SEIR of the Approved Project determined that Mitigation Measure BIO-9 and 11 were to be implemented to reduce biological impacts. These measure would not apply to the 2020 GHGRP Update because implementation would not produce significant impacts. Implementation of the 2020 GHGRP Update would not result in the requirement of any mitigation measures and the impact would be **less than significant.**

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| e) | Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.4.e) Approved Project Analysis.** Implementation of the Approved Project would increase urban uses within the County. There is a high potential for development, such as VMT reduction and roadway improvements to conflict with local policies protecting biological resources. In the GHGRP SEIR, Chapter 88.01 of the Development Code requires the issuance of a permit prior to the removal of regulated trees and plants, which includes native species, thereby reducing the threat to sensitive plant species or areas of biologically valuable vegetation. Sensitive habitats in the County protected through stipulations of Chapter 82.11 (Biotic Resources Overlay) of the Development Code, which implements General Plan Policies regarding the protection and conservation of beneficial rare and endangered plants and animal resources and their habitats. Biotic Resources Overlays are applied to areas that have been identified by a county, State, or federal agency as habitat for species of unique, rare, threatened, or endangered plants or animals or their habitats as listed in the General Plan. Projects implemented through the Approved Project would be required to comply with County's Development Code, Division 8, Chapter 88.01 General Plan Policies to ensure that biological resources would be protected. However, implementation of the GHGRP would have substantial impacts and regulations would not decrease impacts on protected tree species to a level below significance. Therefore, compliance with regulations and policies would ensure conflicts with local policies or ordinances protecting biological resources such as tree preservation would not increase but would remain **significant and unavoidable.**

The Approved Project was determined to result in potential significant impacts pertaining to Biological Resources. As a result of these potentially significant impacts to biological resources in the area, the GHGRP EIR for the Approved Project required implementation of the following mitigation measures:

**MM-BIO-13** The County shall consider whether projects may lead to a significant environment impact as a result of the conversion of oak woodlands consistent with new provisions added to the County Development Code Subsection 88.01.050€(4). Upon determination of a significant effect, he County shall employ one or more of the following measures; preservation replacement or restoration, in lieu of mitigation fee or other mitigation measures

**Preservation.** Preserve existing oak woodlands by recording conservation easements in favor of the County or an approved organization or agency.

**Replacement or restoration.** Replace or restore former oak woodlands. The review authority may require the planting and maintenance of replacement trees,

including replacing dead or diseased trees. The replacement ratio and tree sizes shall be based on the recommendation of an Oak Reforestation Plan prepared by a registered professional forester.

**2020 GHGRP Update Analysis.** Implementation of the 2020 GHGRP Update must be developed consistent with Development Code, Division 8 Resource Management and Conservation Chapter 88.01 and Countywide Plan Policies to protect biological resources with development and implementation of the 2020 GHGRP Update. Development Code requires the issuance of a permit prior to the removal of regulated trees and plants. With regulations and standards, impacts would occur but would not decrease to a level below significance stated in the SEIR. However, implementation of the GHGRP Update would not produce any impacts to conflict with any local policies regarding this resource. With GHG reduction measures complying with regulations, standards, and Countywide Plan Biological Resources Policies NR-5.7 and 5.8 which are equally effective as the General Plan Policies cited above, would avoid or minimize any potential impacts. Therefore, future development implemented in accordance with the 2020 GHGRP Update regarding biological resources protected under local regulations would be **less than significant**.

**Mitigation Measures**

The analysis provided in the certified SEIR of the Approved Project determined that Mitigation Measure BIO-13 was to be implemented to reduce biological impacts. This measure would not apply to the 2020 GHGRP Update because implementation would not produce significant impacts. Implementation of the 2020 GHGRP Update would not result in the requirement of any mitigation measures and the impact would be **less than significant.**

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| f) | Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.4.f) Approved Project Analysis.** Implementation of the GHGRP SEIR would increase uses in areas covered by the multiple species habitat conservation plans for San Bernardino County. The multiple species habitat conservation plans include habitat restoration goals within certain areas within the County. Reduction Measures implemented in the GHGRP could potentially interfere with a habitat conservation plan. With that said, renewable energy generation facilities would need to undergo environmental review under CEQA to determine whether the project would have an impact on a habitat conservation plan and would be required to determine whether there is potential habitat on site for sensitive species. If sensitive species were found on site, the project proponent would be required to consult with USFWS and the CDFW regarding impacts to sensitive species and ensuing mitigation. Compliance with federal, State, local regulations, along with General Plan Policy CO 2.3 and

Program 1 would ensure impacts would be minimized. Therefore, impacts would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** Consistent with the Approved Project, implementation of 2020 GHGRP Update must be developed consistent with a habitat conservation plan and multiple species habitat conservation plans. In the same manner as the Approved Project, the 2020 GHGRP Update would be required to comply with existing regulations and the updated General Plan, which is now called the Countywide Plan Policies to ensure future development is consistent with applicable habitat conservations plans. Therefore, impacts to conflicts with habitat conservation plans from implementation of the 2020 GHGRP Update would be the same as those for the Approved Project, which would be **less than significant** and no mitigation is required.

### Mitigation Measures

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

### Conclusion and Findings for Biological Resources

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated since the SEIR of the Approved Project was certified in 2011.

- Would the 2020 GHGRP Update have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- Would the 2020 GHGRP Update have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- Would the 2020 GHGRP Update have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- Would the 2020 GHGRP Update interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
- Would the 2020 GHGRP Update conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Would the 2020 GHGRP Update conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

The conclusions verifying that an Addendum to the certified 2011 SEIR is the proper CEQA documentation for the 2020 GHGRP Update are presented below.

**No Substantial Project Revisions Requiring Major SEIR Revisions**

The 2020 GHGRP Update would have no impacts on biological resources not already identified in the 2011 SEIR. Consequently, there are no substantial project revisions that would require substantial changes to the analysis or findings of the revisions to the certified 2011 EIR of the Approved Project.

**No Substantial Change in the Physical Environment or Regulations Requiring Major EIR Revisions**

There have been no substantial changes in the physical environment or in the regulations associated with biological resources; thus, no substantial changes in the physical environment or regulations require major revision to the certified 2011 SEIR.

**No New Information Showing New or Substantially More Severe Significant Effects than in the Certified SEIR**

There is no new information showing new or substantially more severe significant effects on biological resources than in the certified 2011 SEIR. As such, no revisions to the certified 2011 SEIR are required.

**No Substantial Changes in the Mitigation Measures or Alternatives**

There are no substantial changes to the mitigation measures or alternatives approved in the certified 2011 SEIR relative to biological resources.

## 4.5 CULTURAL RESOURCES

Would the project:

| | | | | | |
|---|---|---|---|---|---|
| a) | Cause a substantial adverse change in the significance of an archaeological resource pursuant to CCR §15064.5? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.5.a) Approved Project Analysis.** Implementation of the GHG reduction measures of the Approved Project would result in renewable energy resources but would not result in extensive ground disturbance. As future development in accordance with the GHGRP occurs, projects would be subject to compliance with the National Historic Preservation Act (NHPA), the County's Development Code, and Senate Bill 18 along with General Plan Policy CO-3.1, CO-3.4 Program 1, 3, and CO-3.5 Program 5 in order to ensure that substantial adverse changes in the significance of archaeological resources would be less than significant. Finally, Mitigation Measure CR-3 prescribes provisions for avoidance of cultural resources where feasible. Through adherence to federal, State, and local regulations, and General Plan Policy

and Programs, impacts to archaeological resources from implementation of the Approved Project would be **less than significant with mitigation incorporated**.

The Approved Project was determined to result in potential significant impacts pertaining to Cultural Resources. As a result of these potentially significant impacts to cultural resources in the area, the GHGRP SEIR for the Approved Project required implementation of the following mitigation measure:

**MM CR-3** Mitigation of impacts to important cultural resources shall follow the standards established in Section 15064.5 of the *California Environmental Quality Act Guidelines*, as amended to date. For historic resources, this includes the *Secretary of Interior Standards for the Treatment of Historic Properties with Guidelines for Previously Rehabilitating, Restoring and Reconstructing Historic Buildings* according to *CEQA* Section 15126.4 (b)(1).

**2020 GHGRP Update Analysis.** Future development that would implement GHG reduction measures of the 2020 GHGRP Update would not result in extensive ground-disturbing activities that could affect archaeological resources. Any potential impacts would be considered minimal. Future development projects that would implement the GHG reduction measures outlined in the 2020 GHGRP Update would be required to comply with federal, State, and local regulations, along with Countywide Plan- Policy Plan Cultural Resources Policies CO-1.3 and CO-2.3, which are equally effective as the policies cited in the Approved Analysis, and Mitigation Measure CR-3 to ensure impacts to with archaeological resources would not occur. Therefore, impacts would be **less than significant with mitigation incorporated.**

**Mitigation Measures**

The analysis provided in the certified GP EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measure CR-3 was implemented to reduce impacts to cultural resources. This measure would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

| | | | | | |
|---|---|---|---|---|---|
| b) | Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.5.b) Approved Project Analysis.** Implementation of the Approved Project would not directly destroy a unique paleontological resource or site or unique geologic feature, and

future development would not result in extensive ground-disturbing activities on undisturbed soils that would affect paleontological resources or unique geologic features.

As future development occurs, projects would be subject to compliance with the Paleontological Resources Preservation Act (PRPA) in order to ensure that potential impacts to unique paleontological resources and geological features would be less than significant. Additionally, General Plan Policies and Programs 3.4 Program 4 and 5 would ensure protection for paleontological resources through the development process of each project. Through adherence to federal, State, and local regulations, and General Plan Policies and Programs, impacts to paleontological resources or unique geologic features would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** Future development that would implement GHG reduction measures of the 2020 GHGRP Update would not result in high ground-disturbing activities that could affect paleontological resources. Future development projects that would implement the GHG reduction measures in the 2020 GHGRP Update would be required to comply with the PRPA, along with federal, State, and local regulations, and Countywide Plan Cultural Resources Policies CR-2.2 and 2.3, which are equally effective as the policies cited in the Approved Analysis in order to ensure that impacts to unique paleontological resources and geological features would be less than significant. Therefore, impacts would be the same as those identified for the Approved Project, which is **less than significant**. No mitigation measures are required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

| | | | | | |
|---|---|---|---|---|---|
| c) | Disturb any human remains, including those interred outside of formal cemeteries? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.5.c) Approved Project Analysis.** Implementation of the Approved Project does not include extensive ground-disturbing activities, so it is unlikely that development would disturb human remains. If any human remains are discovered during excavation, compliance with California Public Resources Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98 would be required to be implemented.

Future development, in accordance with the GHGRP, would be subject to compliance with the NHPA, CEQA, California Health and Safety Code Section 7050.5, California Public Resources Code Section 5097.98, and General Plan Policy and CO 3.5 Program 5 in order to ensure that

any encounters with human remains are managed with dignity and respect. The County Coroner and Native American Heritage Commission would also be notified if remains are discovered. Compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98 would ensure appropriate lineal descendants are engaged for the respectful and dignified handling of human remains. Through adherence to federal, State, and local regulations, and General Plan policies, impacts to human remains would be **less than significant** and no mitigation was required.

**2020 GHGRP Update Analysis.** Implementation of the GHG reduction measures of the 2020 GHGRP Update would not result in extensive ground-disturbing activities that could affect human remains. Actions that could directly affect human remains include grading, excavation, or other ground-disturbing activities are not proposed in the implementation of the 2020 GHGRP Update. Minor earth disturbance activities associated with the development of solar generation facilities may occur as a result of the 2020 GHGRP Update. Compliance with California Public Resources Health and Safety Code Sections 7050.5 and California Public Resources Code Section 5097.98 would ensure protection for burials that may be encountered during project construction activities. Unanticipated encounters with human remains are managed pursuant to applicable federal, State, and local regulations, as well as Countywide Plan Cultural Resources Policy CR-1.1 which is equally effective as the policy cited in the Approved Analysis to reduce impacts on human remains. Therefore, impacts would be **less than significant**. No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 Update; no mitigation is required.

| | | | | | |
|---|---|---|---|---|---|
| d) | Cause a substantial adverse change in the significance of historical resources as defined in CCR §15064.5? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.5.d) Approved Project Analysis.** Implementation of the Approved Project would include energy efficiency standards and installation of solar panels. As a result, energy efficiency retrofits and installation may result in significant impacts on historic resources by altering the physical characteristics of historic buildings. As future development occurs, projects would be subject to compliance with the NHPA, CEQA, and County's Development Code, along with General Plan Policy CO-3.1 and Programs CO-3.1-1 and 2, along with CO-3.4-3, in order to ensure that substantial adverse changes in the significance of historical resources would be less than significant. Through adherence to federal, State, and local regulations and General Plan Policy and Programs, impacts to historical resources from implementation of the GHGRP would be reduced to **less than significant.** No mitigation was required.

**2020 GHGRP Update Analysis.** The 2020 GHGRP Update reduction measures are a continuation of the Approved GHGRP measures that will further contribute to reducing GHG emissions within the County. Future development could result in changes that could affect historic structures. With that said, actions that could directly affect historical structures include energy retrofits and installation that could alter physical characteristics of existing historic structures and other buildings located within the setting and context of historic districts. Compliance with the National Register of Historic Places, CEQA, and the County's Development Code, along with Countywide Plan Cultural Resources Policies CR-2.1 and 2.2 which are equally effected as the policies cited in the Approved Analysis would ensure that substantial adverse changes in the significance of historical resources would be less than significant. Therefore, impacts would be the same as those identified for the Approved Project, which is **less than significant**. No mitigation is required.

### Mitigation Measures

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 Update; no mitigation is required.

### Conclusion and Findings for Cultural Resources

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated to move the paleontological resources threshold to Geology and Soils since the SEIR of the Approved Project was certified in 2011.

- Would the 2020 GHGRP Update cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?
- Would the 2020 GHGRP Update cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?
- Would the 2020 GHGRP Update disturb any human remains, including those interred outside of dedicated cemeteries?

Cultural Resources impacts pertaining to the 2020 GHGRP Update would be equal to or less than those of the Approved Project that was concluded in the certified 2011 SEIR. The conclusions verifying that an Addendum to the certified 2011 SEIR is the proper CEQA documentation for the 2020 GHGRP Update is presented below.

### No Substantial Project Revisions Requiring Major SEIR Revisions

The 2020 GHGRP Update would have no impacts on cultural resources, which is the same as the Approved Project. Consequently, there are no substantial project revisions that would require substantial changes to the analysis or findings of the revisions to the certified 2011 SEIR of the Approved Project.

### No Substantial Change in the Physical Environment or Regulations Requiring Major SEIR Revisions

There have been no substantial changes in the physical environment or in the regulations associated with cultural resources; thus, no substantial changes in the physical environment or regulations require major revision to the certified 2011 SEIR.

### No New Information Showing New or Substantially More Severe Significant Effects than in the Certified SEIR

There is no new information showing new or substantially more severe significant effects on cultural resources than in the certified 2011 SEIR. As such, no revisions to the certified 2011 SEIR are required.

### No Substantial Changes in the Mitigation Measures or Alternatives

There are no substantial changes to the Mitigation Measures or alternatives approved in the certified 2011 SEIR relative to Cultural Resources.

## 4.6 GEOLOGY AND SOILS

Would the project:

| | | | | | |
|---|---|---|---|---|---|
| Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | | |
| a) | Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |
| b) | Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| c) | Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| d) | Landslides? | ☐ | ☐ | ☒ | ☐ |

**4.6.a–d) Approved Project Analysis.** San Bernardino County has very diverse geology, topography, and physiography that affect the suitability of a site for various types of existing and potential future land uses. The Safety Background Report (2005) describes the geologic setting and seismic and non-seismic geologic hazards within the County that can impact land use. Virtually the entire County is potentially subject to some level of strong seismic ground shaking with potential levels being greatest in the western portion of the County and at sites in close proximity to a known earthquake (i.e., active) or potentially active fault. Potential hazards associated with landslides (both seismic and non-seismic) are limited to sites situated on and near the crest and base of slopes. The General Plan 2007 Final EIR identifies impacts and mitigation measures to address any potential impacts on geology and soils due to GP implementation. The implementation of the Approved Project was determined not to have any substantial effect on the geological resources and soil beyond what was evaluated in the General Plan EIR. The GHGRP SEIR for the Approved Project therefore did not discuss the impacts related to Geology and Soils. Further, reduction measures in the GHGRP would be required to comply with federal and California Building Standards Code (CCR Title 24, Part 2) as well as performance of State-licensed surveys of soil and geologic conditions in areas subject to seismic ground shaking, liquefaction, and landslide hazards. Additionally, General Plan Policies include actions aimed at protecting people and structures from geologic hazards. Compliance with these standards would reduce potential seismically related impacts in the County. Therefore, impacts related to fault rupture, strong seismic ground shaking, liquefaction, and potential landslides would be **less than significant.** No mitigation was required.

**2020 GHGRP Update Analysis.** Implementation of the reduction measures in the 2020 GHGRP Update, are required to implement the provisions of the California Building Code (CBC) (CCR Title 24, Part 2). Compliance with CBC standards and the updated General Plan, which is now known as the Countywide Plan - Policy Plan Hazards Policies HZ-1.1 and 1.2 would reduce potential fault rupture hazards, along with ground shaking, liquefaction, seismically induced settlement, and landslide hazards. As with the Approved Project, impacts related to fault rupture, strong seismic ground shaking, liquefaction, and potential landslides from or to development that would implement the 2020 GHGRP Update would be the same as those identified for the Approved Project. Potential impacts would be **less than significant**. No mitigation is required.

**Mitigation Measures**

There were no impacts analyzed or mitigation measures identified for the Approved Project beyond what was identified in the General Plan EIR. This is also true for the 2020 GHGRP Update; no mitigation is required.

| | | | | | |
|---|---|---|---|---|---|
| e) | Result in substantial soil erosion or the loss of topsoil? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.6.e) Approved Project Analysis.** As discussed in Checklist Question 4.6.a–d, above, the implementation of Approved Project was determined not to have any significant impacts on soil resources beyond what was evaluated in the General Plan EIR. Thus, the GHGRP SEIR did not evaluate the impacts related to erosion or loss of topsoil. Also, as noted above, compliance with CBC standards and the County-approved engineered grading plans for future development would reduce potential soil erosion impacts. Implementation of reduction measures in the GHGRP, such as renewable energy and transit infrastructure, would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) that includes Best Management Practices (BMPs) aimed at reducing soil erosion and loss of topsoil. Following CBC standards and grading plans would further prevent significant impacts and reduce erosion effects to less than significant levels. Implementation of the regulations and General Plan Policies would ensure that impacts related to soil erosion and loss of topsoil would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** Future development in accordance with the 2020 GHGRP Update is not expected to cause any significant impacts on soils, similar to the Approved Project. Also, compliance with CBC standards and the County-approved grading plans would reduce potential soil erosion impacts. Impacts related to soil erosion and loss of topsoil, from development that would implement the 2020 GHGRP Update would be **less than significant**. No mitigation is required.

**Mitigation Measures**

There were no impacts analyzed or mitigation measures identified for the Approved Project beyond what was identified in the General Plan EIR. This is also true for the 2020 GHGRP Update; no mitigation is required.

| | | | | | |
|---|---|---|---|---|---|
| f) | Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.6.f) Approved Project Analysis.** Human activities increase the potential for persons and property to be subject to geologic instability through development that is improperly located or constructed in unstable areas. The liquefaction-susceptible sites are limited to areas of the County underlain by loose, unconsolidated granular soils and shallow groundwater (typically 50 feet or less below ground surface). Grading on slopes and ridgelines results in impacts to the topography and increase the likelihood of soil erosion. The General Plan EIR evaluated the impacts associated with on-site or off-site landslide, lateral spreading, and subsidence and identified Mitigation Measures GEO-1 through 4 that help address these issues. The GHGRP SEIR did not evaluate these impacts any further because they were found insignificant beyond what was evaluated in General Plan EIR. Further, projects implemented through the Approved Project are required to comply with State and local standards governing soil stability. Compliance with CBC standards would avoid or reduce potential significant impacts on unstable geological units and soils resulting from future development. The CBC addresses construction in areas subject to subsidence and lateral spreading. On unstable soils, geotechnical certification must occur for project approval to ensure that impacts from geological hazards are reduced to less than significant levels. Standards would ensure future development is protected from unstable geology and soils such as landslides, lateral spreading, subsidence, liquefaction, and/or collapse. Compliance with CBC standards (CCR Title 24, Part 2) would ensure impacts related to future development on unstable soil remain **less than significant with mitigation incorporated.**

The Approved Project was determined to result in potential significant impacts pertaining to geology and soils. As a result of these potentially significant impacts to geology and soils in the area, the GP EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM GEO-1** Use the requirements of the California Building Code to reduce the adverse effects on life and property by properly designing and constructing structures to withstand damage from severe seismic shaking.

**MM GEO-2** Enhance the mitigation of potential geologic hazards to new development by adding the requirements for evaluation of seiche and adverse soils conditions to the Geologic Hazards Overlay.

**MM GEO-3** Assess and mitigate the potential impacts of adverse soils conditions posed by hydro collapsible, expandable, corrosive, and other adverse soils that may be found in certain locations in the County, such as desert and mountain playas, fault zones and other special geologic features through the application of the provisions of the Geologic Hazard Overlay.

**MM GEO-4** Within the County's Development Code, one overlay district has been established relating specifically to protecting County citizens from geological hazards. These areas are designated Geologic Hazard "GH" Overlay District, which identifies areas that are subject to potential geologic problems, including active faulting, landsliding, debris flow, rockfall, and liquefaction.

**2020 GHGRP Update Analysis.** As with the Approved Project, future development in accordance with the 2020 GHGRP Update could be subject to geological instability. Compliance with the CBC standards would apply to development implemented in accordance with the 2020 GHGRP Update. Standards would ensure future development is protected from unstable geology and soils such as landslides, lateral spreading, subsidence, liquefaction, and/or collapse. Compliance with CBC standards (CCR Title 24, Part 2) and Countywide Plan-Policy Plan Hazards Policy HZ-1.2, which is equally effective as the polices in the General Plan, would ensure impacts related to future development on unstable soil remain **less than significant with mitigation incorporated.**

**Mitigation Measures**

The analysis provided in the certified GP EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measures GEO-1 through 4 were implemented to reduce impacts related to Geology and Soils. These measures would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

| | | | | | |
|---|---|---|---|---|---|
| g) | Be located on expansive soil, as defined in Table 18 1-B of the California Building Code (2001), creating substantial risks to life or property? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.6.g) Approved Project Analysis.** Expansive soil tends to contain clay particles prone to large volume changes such as swelling and shrinkage due to changes in water content. When swelling occurs, the change in volume applies heavy pressures on objects that are placed on them. Future development as a result of the Approved Project could occur in areas associated with expansive soils. However, development on sites that contain expansive soils would be required to follow CBC standards and obtain County-approved grading plans. Therefore, development would include proper characterization of expansive soil hazards through soils investigations that incorporate compliance measures in accordance with the CBC. The General Plan EIR assesses the impacts associated with expansive soils on life and property and

prescribe Mitigation Measures GEO-1 through GEO-4, above, plus Mitigation Measure GEO-5, below, to ensure the impacts associated with adverse soil conditions are assessed and mitigated, particularly expandable soils in desert and mountain playas of the County. The GHGRP SEIR did not further assess the impacts associated with geology and soils as they found the effects not to be significant beyond what was evaluated in the General Plan EIR. Therefore, for the Approved Project, potential impacts associated with expansive soils would be **less than significant with mitigation incorporated**.

The Approved Project was determined to result in potential significant impacts pertaining to Geology and Soils. As a result of these potentially significant impacts related to Geology and Soils in the area, the GP EIR and GHGRP SEIR for the Approved Project required implementation of Mitigation Measures GEO-1 through GEO-5, as detailed in Response to Checklist Question 4.6.f, and Mitigation Measure GEO-5:

**MM GEO-5** The County Development Code, updated as a program component to the General Plan Update, includes new hillside grading standards at Section 83.08. Refer the Development Code to view the full text of the standards. The application of the prescribed standards will reduce the potential impacts of grading on hillside terrain.

**2020 GHGRP Update Analysis.** Future development in accordance with the 2020 GHGRP Update could result in development of solar installations on expansive soils within the County. However, the impacts would not be significant beyond what was evaluated in the General Plan EIR, as determined in the GHGRP SEIR. Future compliance with the CBC standards and County-approved grading plans would avoid or reduce potential impacts from expansive soil to less than significant levels. Therefore, impacts would be **less than significant.**

### Mitigation Measures

The analysis provided in the certified GP EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measures GEO-1 through GEO-5 were implemented to reduce impacts related to geology and soils. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

| | | | | | |
|---|---|---|---|---|---|
| h) | Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for disposal of wastewater? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.6.h) Approved Project Analysis.** Many existing properties within the Desert region of the County rely on septic systems or alternative wastewater disposal systems when sewers are not available for disposal. The threshold density standards for uses of septic systems versus wastewater treatment facilities (package plants or tie-ins to a regional system) are

based on Regional Water Quality Control Board standards. The County relies on the expertise and regulation by the Regional Water Quality Control Boards to protect ground and surface water from septic system impacts. Each water board serving San Bernardino County has specific regulations for septic systems appropriate for the region it serves. The GHGRP SEIR did not evaluate the impacts to resources due to soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for disposal of wastewater. Therefore, impacts related to the suitability of soils for septic systems would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** None of the GHG reduction measures listed in the 2020 GHGRP Update would require the need for septic tanks or alternative wastewater disposal systems. Therefore, like the Approved Project there will be no impacts associated with GHGRP Update on the suitability of soils for septic systems. No mitigation measures were identified in the GHGRP SEIR and no new mitigation measures are required for the 2020 GHGRP Update with regard to soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems. Therefore, impacts related to soil suitability to support septic systems would be **less than significant.** No mitigation is required.

### Mitigation Measures

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

### Conclusion and Findings for Geology and Soils Resources

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated since the SEIR of the Approved Project was certified in 2011.

- Would the 2020 GHGRP Update directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?
    - Strong seismic ground shaking?
    - Seismic-related ground failure, including liquefaction?
    - Landslides?
- Would the 2020 GHGRP Update result in substantial soil erosion or the loss of topsoil?
- Would the 2020 GHGRP Update be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral, spreading, subsidence, liquefaction or collapse?
- Would the 2020 GHGRP Update be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

- Would the 2020 GHGRP Update have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?
- Would the 2020 GHGRP Update directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (See Section 4.5.b.)

Adverse effects related to geologic conditions, impacts, and soils were addressed in the previous environmental documents prepared for the San Bernardino County General Plan EIR, which found that development of the plan area would result in potentially significant impacts related to geological conditions and soil conditions. It was determined by the General Plan EIR that all impacts associated with geological and soils conditions could be mitigated to below a level of significance.

The GHGRP did not result in any new development potential or construction of facilities that would be impacted by these conditions beyond what the General Plan EIR considered. In addition, the implementation of projects and activities under the GHGRP would be subjected to all of the County development standards regarding seismic and geologic stability; therefore, the GHGRP SEIR did not address these impacts. The impacts pertaining to the 2020 GHGRP Update related to geology and soils would not be significant as for the Approved Project that was concluded in the GHGRP SEIR. The conclusions verifying that an Addendum to the 2011 GHGRP SEIR is the proper CEQA documentation for the 2020 GHGRP Update are presented below.

**No Substantial Project Revisions Requiring Major SEIR Revisions**

The 2020 GHGRP Update would have no impacts on geology and soils, which is the same as the Approved Project. Consequently, there are no substantial project revisions that would require substantial changes to the analysis or findings of the revisions to the SEIR of the Approved Project.

**No Substantial Change in the Physical Environment or Regulations Requiring Major SEIR Revisions**

There have been no substantial changes in the physical environment or in the regulations associated with geology and soils; thus, no substantial changes in the physical environment or regulations require major revision to the 2011 GHGRP SEIR.

**No New Information Showing New or Substantially More Severe Significant Effects than in the GHGRP SEIR**

There is no new information showing new or substantially more severe significant effects on geology and soils than in the General Plan EIR and GHGRP SEIR. As such, no revisions to the 2011 GHGRP SEIR are required.

**No Substantial Changes in the Mitigation Measures or Alternatives**

There are no substantial changes to the mitigation measures or alternatives approved in the General Plan EIR relative to Geology and Soils.

## 4.7 GREENHOUSE GAS EMISSIONS

Would the project:

| | | | | | |
|---|---|---|---|---|---|
| a) | Generate greenhouse gas emissions, either directly or indirectly, that may have a significance impact on the environment? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.7.a) Approved Project Analysis.** Assembly Bill (AB) 32 required the California Air Resources Board (CARB) to reduce statewide GHG emissions to 1990 levels by 2020. As part of this legislation, CARB was required to prepare a "Scoping Plan" that demonstrates how the State would achieve this goal. The Scoping Plan was adopted and, in it, local governments were described as "essential partners" in meeting the statewide goal, recommending a GHG reduction level 15 percent below 2008 levels, depending on when a full emissions inventory is available, by 2020. Accordingly, Executive Order S-3-05 establishes a more aggressive emissions reduction goal for the year 2050 of 80 percent below 1990 emissions levels. However, when analyzing long-range plans, such as general plans, the planning horizon would often surpass the 2020 timeframe for implementation of AB 32.

Achievement of the 2050 reduction target (80 percent below 1990 levels of emissions by 2050) in Executive Order S-3-05 would require the State to reduce emissions below the 2008 baseline levels of GHG emissions by 2050 while also accommodating considerable population and economic growth within the unincorporated areas. Carbon neutral (no emissions) energy would require significant changes to the electric generating system in the United States where renewable energy and energy storage supply nearly all the electricity in the system and transportation eliminates fossil fueled trucks and passenger vehicles. In addition, implementation of the GHGRP would comply with General Plan Policies and Programs to avoid impacts on Water Supply (General Plan Policies CI 11.7, CI 11.9, CI 11.12), Flooding Events (General Plan Policies S 5.1, S 5.1 Program 1, 2, 3, 8), Wildland Fire Hazards (S 3.1 Program 7, 8, 9, Policy M/S 1.2), Biological Resources (General Plan Policies M/CO 1.7, CO 2.4 Program 3), and Agricultural Resources (General Plan Policies CO 6.3, CO 6.3 Program 2).

Compliance with federal, State, local regulations, including General Plan Policies listed above would ensure potential impacts related to climate change would be reduced or avoided. The GHGRP reduction measures would meet goals of GHGs for the County. Therefore, impacts on GHG emissions would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** Consistent with the State's adopted AB 32 GHG reduction target, the County set a goal to reduce emissions to 1990 levels by 2020. This target was calculated as a 15 percent decrease from 2008 levels. The County achieved this 2020 GHG reduction target that was set in the approved GHGRP. On January 20, 2017, CARB released the 2017 Scoping Plan Update, which provides strategies for achieving the 2030 target

established by EO B-30-15 and codified in SB 32. The 2017 Scoping Plan Update recommends local plan level GHG emissions reduction goals. The 2020 GHGRP Update presents a target for 2030 that then California Governor Jerry Brown announced through EO B-30-15 and SB 32, which is to reduce emissions to 40 percent below 2008 levels. The goal would put the County on a path toward the State's long-term goal to achieve statewide carbon neutrality by 2045 per Executive Order B-55-18.

The 2020 GHGRP Update focuses on a 2030 GHG emissions reduction target and provides a framework for long-term GHG emissions reductions toward the ultimate 2045 goal, which is carbon neutrality per Executive Order B-55-18. Based on the 2020 GHGRP Update, GHG emissions in the County were 2,873,469 metric tons of carbon dioxide equivalent (MT $CO_2e$) in 2016, which was a high reduction from baseline (2007) emissions of 6,253,063 MT $CO_2e$. By 2030, emissions are expected to be 3,051,959 MT $CO_2e$. Implementation of the GHG community emissions reduction measures from the 2020 GHGRP Update, which include reductions from both the 2020 GHGRP Update measures and the State and local reduction programs, would be 1,754,098 MT $CO_2e$ by 2030, which is 40 percent below 2008 levels. Therefore, GHG emissions would meet the applicable AB 32 and SB 32 targets.

Proposed 2020 GHGRP Update measures would achieve these reductions by decreasing energy consumption in existing residential and commercial buildings, increasing water efficiency, increasing awareness of sustainability issues, reducing landfill waste, promoting clean energy use, expanding sustainable transportation options, and optimizing vehicular travel.

The 2020 GHGRP Update includes enhanced GHG reduction measures such as Urban Tree Planting, Transportation Demand Management and Signal Synchronization, Waste Diversion and promotes Water-Efficient Landscaping Practices compared to the Approved GHGRP. Implementation of the 2020 GHGRP Update would not generate new significant GHG impacts. Through compliance with federal, State, and Countywide Plan – Policy Plan Solid Waste and Natural Resources Policies IU-4.3 and NR-1.1(which are equally effective as those cited in the "Approved Project Analysis"), along with the Renewable Portfolio Standard, Title 24 Energy Efficiency Standards, and Clean Car Fuel Standard, potential impacts would be reduced or avoided. Therefore, GHG impacts from implementation of the 2020 GHGRP Update would be **less than significant**. No mitigation is required.

### Mitigation Measures

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

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| b) | Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.7.b) Approved Project Analysis.** In 2007, two separate emission inventories were prepared for the County's GHG Inventory and GHGRP: an External Inventory and an Internal Inventory. The External Inventory includes GHG emissions produced by the unincorporated communities, private industry, and development that is located within the area subject to the County's discretionary land use authority and its ministerial building permit authority (External Inventory). The Internal Inventory includes GHG emissions associated with the County's governmental activities, services, and internal operations (Internal Inventory). From the External Inventory of the GHGRP, GHG emissions totaled 6,253,063 MT $CO_2e$, with Stationary Sources being the largest contributor with 2,866,435 MT $CO_2e$ (45.8 percent) followed by Transportation with 1,631,666 MT $CO_2e$ (26.1 percent). As for Internal Inventory, emissions totaled 339,714 MT $CO_2e$, with Solid Waste being the largest contributor with 206,817 MT $CO_2e$ (60.9 percent) followed by County Facilities with 62,981 MT $CO_2e$ (18.5 percent).

The GHGRP describes the reduction strategies currently being employed by the County, through implementation of the GHGRP, and by the State, through a variety of legislation and regulations. The combination of existing reduction strategies and proposed new strategies identified in the GHGRP will be assembled into an integrated plan to reduce the countywide GHG emissions level. In addition, proposed new private developments will also contribute to GHG emissions reduction through the County's GHG development review process, AB 32 requirements, and other state initiatives. In addition, measurable reductions of GHG emissions will be achieved through the County's Development Review Process (DRP) by applying appropriate reduction requirements as part of the discretionary approval of new development projects. Through the DRP, the County will implement CEQA requiring new development projects to quantify project GHG emissions and adopt feasible mitigation to reduce project emissions below a level of significance. Implementation of the GHGRP would substantially reduce projected unmitigated year 2020 emissions. Both External and Internal reduction measures would address the resultant emissions of buildings (associated with energy use), transportation and land use emissions, solid waste emissions, industrial fuel combustion and process emissions, agriculture emissions, emissions generated for the energy used to pump water, County fleet emissions, County operated landfills, and the emissions from County workers commuting to their jobs. Implementation of the GHGRP reduction measures complement reduction standards of the AB 32 Scoping Plan. Therefore, the GHGRP does not conflict with the AB 32 Scoping Plan.

In addition, the GHGRP quantifies the GHG equivalent of State, regional, and local reduction policies and efforts. State reduction measures are quantified using the methodology included in the AB 32 Scoping Plan and Technical Appendices (CARB 2008). Regional and local

reductions are quantified with the best available methodology from agencies and associations such as the California Environmental Protection Agency (CalEPA), California Climate Action Registry (CCAR), and California Energy Commission (CEC). The GHG reduction potential is clearly and comprehensively documented. The implementation of the proposed project would be consistent with State measures to reduce greenhouse gas emissions.

Implementation of the GHGRP SEIR would provide reduction measures such as energy efficiency, VMT reduction, and transit infrastructure, which would further reduce GHG emissions within the County and would not conflict with any applicable plans, policies, or GHG regulations. Compliance with federal, State, and local regulations, including General Plan Policies would ensure potential impacts would not occur. Therefore, the GHGRP would not conflict with applicable GHG plans, policies, or regulation and impacts would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** The County's 2016 GHG Inventory update consists of different economic sectors GHG emissions. The transportation sector is the largest contributor to the GHG emissions with 1,519,146 MT $CO_2e$ (53 percent of total emissions) followed by building energy with 948,183 MT $CO_2e$ (33 percent of total emissions). Solid waste, agriculture, water, off-road transportation, and wastewater sectors contribute to the rest of the emissions as a whole. The State has set goals for reducing GHG emissions by 2020, 2030, and 2045 through AB 32, SB 32, SB 100, and EO-B-55-18.

The State has provided guidance to local jurisdictions as "essential partners" in achieving the State's goals by identifying a 2020 and 2030 recommended reduction goal. That goal, stated in the AB 32 Scoping Plan, was for local governments to achieve a 15 percent reduction below 2008 levels by 2020, which aligns with the State's goal of not exceeding 1990 emissions levels by 2020.

The State has recently passed an Executive Order (EO-B-55-18), which mandates statewide climate neutrality by 2045. In the interim, the State has also provided a target of 40 percent below 2005 to 2008 levels by 2030. The County has identified this target as a 40 percent below 2008 emission levels by 2030. In addition, the County's Business As Usual (BAU) and Adjusted Business As Usual (ABAU) forecasts were developed and two future years are forecast for each scenario: years 2020 and 2030. The 2020 and 2030 forecast years are consistent with the goals identified in AB 32, SB 32, and the corresponding Scoping Plan, which identifies statewide GHG reduction targets by 2020 and 2030.

The County's total GHG emissions in 2007 were 6,253,063 metric tons of MT $CO_2e$ and in 2016 the emissions were 2,873,469 MT $CO_2e$. The 2017 Scoping Plan provides the State's roadmap in achieving a statewide reduction of 40 percent below 1990 levels of emissions by 2030. Future emissions estimates within the County also included reductions that would happen with implementation of the 2017 Scoping Plan at the State level. A great level of emission reduction is anticipated within the County as a result of the 2017 Scoping Plan Update Policies and legislation implemented at the State level. The County implemented local reduction measures that would further reduce GHG emissions beyond regional and State measures. The 2020 GHGRP Update includes enhanced GHG reduction measures such as

energy efficiency retrofits, renewable energy, transit infrastructure, and VMT reduction, along with waste diversion and water conservation programs, which would further reduce GHG emissions within the County and would not conflict with any applicable GHG plans, policies, or regulations. Compliance with federal, State, and local regulations, would ensure potential impacts would not occur. Implementation of the 2020 GHGRP Update would not generate new significant impacts. Therefore, GHG impacts from implementation of the 2020 GHGRP Update would be **less than significant**. No mitigation is required.

### Mitigation Measures

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

### Conclusion and Findings for GHG Emissions

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated since the SEIR of the Approved Project was certified in 2011.

- Would the 2020 GHGRP Update generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- Would the 2020 GHGRP Update conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

GHG emissions impacts pertaining to the 2020 GHGRP Update would be equal to or less than those of the Approved Project that was concluded in the certified 2011 SEIR. The conclusions verifying that an Addendum to the certified 2011 SEIR is the proper CEQA documentation for the 2020 GHGRP Update are presented below.

### No Substantial Project Revisions Requiring Major SEIR Revisions

The 2020 GHGRP Update would have no impacts on GHG emissions, which is the same as the Approved Project. Consequently, there are no substantial project revisions that would require substantial changes to the analysis or findings of the revisions to the certified 2011 SEIR of the Approved Project.

### No Substantial Change in the Physical Environment or Regulations Requiring Major SEIR Revisions

There have been no substantial changes in the physical environment or in the regulations associated with GHG emissions; thus, no substantial changes in the physical environment or regulations require major revision to the certified 2011 SEIR.

### No New Information Showing New or Substantially More Severe Significant Effects than in the Certified SEIR

There is no new information showing new or substantially more severe significant effects on GHG emissions than in the certified 2011 SEIR. As such, no revisions to the certified 2011 SEIR are required.

**No Substantial Changes in the Mitigation Measures or Alternatives**

There are no substantial changes to the mitigation measures or alternatives approved in the certified 2011 SEIR relative to GHG emissions.

## 4.8 HAZARDS AND HAZARDOUS MATERIALS

Would the project:

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|---|---|---|---|---|---|
| a) | Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.8.a) Approved Project Analysis.** Every home, business, and industry uses or produces, to some extent, flammable, hazardous, or toxic materials. Implementation of the GHGRP includes reduction measures and would not result in the routine of transport, use, or disposal of hazardous materials. Reduction measures included in the approved GHGRP consist of energy incentives, renewable energy generation, and reduction of VMT and could result in the accidental release of hazardous materials in the environment and/or exposure to the public.

These reduction measures are regulated by County Ordinances, General Plan Policies, and State and federal regulations. Policies and regulations would ensure any potential hazardous material would not be released, exposed, or transported. Finally, Mitigation Measures HAZ-1, 2, and 5 are prescribed to help eliminate impacts where feasible. Compliance with the existing regulations including Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), and CCR Title 22 including mitigation measures would ensure that impacts related to the routine handling of hazardous materials associated with future development accommodated by the GHGRP would be **less than significant with mitigation incorporated**.

The Approved Project was determined to result in potential significant impacts pertaining to accidental release of hazardous materials. As a result of these potentially significant impacts in the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM HAZ-1** The County shall promote the proper handling, storage transportation and disposal of hazardous materials and hazardous wastes through implementing a variety of regulatory, technical oversight, emergency and waste management services. These programs are effective mechanisms for reducing the potential impact to the public health and safety and the environment.

**MM HAZ-2** The County shall provide 24-hour response to emergency incidents involving hazardous materials of wastes in order to protect the public and the environment from accidental releases and illegal activities.

**MM HAZ-5** The County shall inspect hazardous material handlers and hazardous waste generators to ensure full compliance with laws and regulations.

**2020 GHGRP Update Analysis.** Construction activities associated with retrofit and renovation projects or transit-oriented development projects that would be implemented under the 2020 GHGRP Update may require use of common but potentially hazardous construction materials, including vehicle fuels, cleaning materials, and caustic construction compounds. If incorrectly transported, handled, or disposed of, these substances could pose a potential health risk to construction workers, public and environment. However, the transport and handling of these common, potentially hazardous materials would occur in accordance with California Occupational Safety and Health Administration (OSHA) guidelines. Further, such materials would be disposed of in accordance with California Department of Toxic Substances Control (DTSC) and local regulations. Consistent with the Approved Project, the 2020 GHGRP Update would comply with the existing regulations, programs, and policies including mitigation measures provided in the General Plan EIR. No new mitigation measures are required for the 2020 GHGRP Update with regard to transport, use, storage, and disposal of hazardous materials. The 2020 GHGRP Update would be **less than significant with mitigation incorporated**.

**Mitigation Measures**

The analysis provided in the certified General Plan EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measures HAZ-1, 2, and 5 were implemented to reduce impacts related to hazardous materials. These measures would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

| | | | | | |
|---|---|---|---|---|---|
| b) | Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.8.b) Approved Project Analysis.** Future development that may be implemented through the GHGRP would include GHG reduction measures such as, energy efficiency retrofits, renewable energy generation, and VMT reduction, which may cause accidental releases of hazardous materials or hazardous wastes at some time. A hazardous material spill or release can pose a risk to life, health, or property. An incident can result in the evacuation of a few people, a section of a facility, or an entire neighborhood. There is also the potential for previously unknown hazardous materials contamination from historical use of a property, including currently vacant properties, being released during future development activities. In

case a release occurs, existing federal, State, and local policies require action from the applicable enforcement agency. It is unlikely that any such activities would be extensive and beyond the capacities of typical containment or safe remediation. Furthermore, such risks are no different than those for existing uses. Compliance would be required with the existing regulations, programs, and policies, including Resource Conservation and Recovery Act (RCRA) and Hazardous Waste Management Plan (HWMP) for hazardous waste disposal, transportation, OSHA, and Federal Clean Air Act. Implementation of and compliance with CCR Title 22 would ensure that impacts related to accidental release of hazardous materials would be reduced or avoided. Potential foreseeable accidents would be reduced with the appropriate regulations, codes, and permits. Finally, Mitigation Measures HAZ-1 and 2 are prescribed to help eliminate impacts on hazardous materials where feasible. Compliance with these regulations and mitigation measures would ensure that impacts related to accidental release of hazardous materials as a result of future development consistent with the GHGRP would be **less than significant with mitigation incorporated**.

The Approved Project was determined to result in potential significant impacts pertaining to accidental release of hazardous materials. As a result of these potentially significant impacts in the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of Mitigation Measures HAZ-1 and HAZ-2, as detailed in Response to Checklist Question 4.8.a, above.

**2020 GHGRP Update Analysis.** Projects implemented through the 2020 GHGRP Update would comply with the existing regulations, updated General Plan policies, which are known as the Countywide Plan policies, and mitigation measures governing hazardous materials. Therefore, compliance with regulations would reduce the potential of the release of hazardous materials on the surrounding environment and the impacts would be the same as those identified for the Approved Project (**less than significant with mitigation incorporated**).

**Mitigation Measures**

The analysis provided in the certified General Plan EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measures HAZ-1 and 2 were implemented to reduce impacts related to hazardous materials. These measures would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

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| c) | Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.8.c) Approved Project Analysis**. Federal, State, and local school district policies and procedures would be sufficient to minimize risks to school facilities, students, and faculty, as

well as to the community. Compliance with the existing regulations, programs, and policies, including Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), RCRA, and CCR Titles 22 would ensure that hazardous material risks to schools from implementation of the GHGRP would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** As discussed in response to Checklist Questions 4.8.a and 4.8.b, any future development projects that would implement 2020 GHGRP Update measures would be subject to federal, State, and local regulations regarding the use and disposal of hazardous materials and wastes. Therefore, indirect effects associated with the 2020 GHGRP Update, including sites within one-quarter mile of an existing or proposed school, would be reduced to **less than significant**. No mitigation measures were identified in General Plan EIR or GHGRP SEIR EIR and no new mitigation measures are required for the 2020 GHGRP Update with regard to hazardous materials within one-quarter mile of an existing or proposed school.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

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| d) | Be located on a site which is included on a list of hazardous materials compiled pursuant to California Government Code section 65962.5 and, as a result, would create a significant hazard to the public or the environment? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.8.d) Approved Project Analysis.** The California Environmental Protection Agency (CalEPA) identifies sites within the County included on the Cortese List compiled pursuant to Government Code Section 65962.5. Past and/or current activities at these sites may have resulted in contamination. The County would review the siting of renewable energy generation to ensure there would be no hazards to the public or environment. Local regulations and policies, including CERCLA, RCRA, and CCR Title 22, would ensure risk of development on or in proximity to sites included on a list compiled pursuant to California Government Code Section 65962.5 from implementation of the GHGRP SEIR would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** Consistent with the Approved Project, future development projects that would implement 2020 GHGRP Update measures could expose people to hazardous materials from sites included on a list compiled pursuant to California Government Code Section 65962.5, and hazardous materials could create an environmental or health hazard if left in place. However, any future development projects that would implement 2020 GHGRP Update measures would be subject to environmental review, which would include determination of whether the proposed site is on the Cortese List, whether further evaluation or cleanup action is required, or if the case has received regulatory closure and no further

action is required. If located on a Cortese list site, the proposed project would be required to comply with applicable federal, State, and local regulations related to hazardous materials, which would ensure there would be minimal risk of significant hazard to the public or the environment. Therefore, impacts would be **less than significant**. No mitigation measures were identified in the General Plan EIR or GHGRP SEIR and no new mitigation measures are required for the 2020 GHGRP Update with regard to sites included on the Cortese List pursuant to Government Code Section 65962.5 that would create a significant hazard to the public or environment.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

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| e) | If located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.8.e) Approved Project Analysis.** The County coordinates with airport authorities to ensure that any land uses within the airport vicinity are required to be consistent with the airport's Land Use Plan and Land Use Compatibility Plan. Future development associated with the GHGRP would make sure renewable energy generation would not cause any safety hazards to the airport safety zones or people around the area. The potential risk of death or injury from aircraft accidents could rise to unacceptable levels if land uses surrounding an airport introduce large numbers of residents to the area, allow businesses to introduce large numbers of workers, or permit buildings that are too tall or too close to primary air hazard zones (landing and takeoff areas at either end of a runway) or secondary air hazard zones (areas adjacent to a runway or directly under approach zones for landing or takeoff). The GHGRP SEIR does not directly propose these sorts of land uses, and compliance with existing General Plan Policies, including Mitigation Measure HAZ-16, would ensure that impacts related to public airport and safety hazards as a result of future development accommodated by GHGRP would be **less than significant with mitigation incorporated**.

The Approved Project was determined to result in potential significant impacts pertaining to safety hazards. As a result of these potentially significant impacts in the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measure:

**MM HAZ-16** For all purposed development in the County, the County shall require the review of any and all ACLUP within proximity of the development to determine land use compatibility, thereby minimizing (mitigating) any potential hazards to airport operations, people, and property.

**2020 GHGRP Update Analysis.** The County would review projects as a result of implementation of the 2020 GHGRP Update to ensure that it would not cause any safety hazards to the airport or people around the area. In addition to adherence to all local, State, and federal regulations, Countywide Plan policies (which are equally effective as the older General Plan Policies cited in the "Approved Project Analysis"), including Mitigation Measure HAZ-16, would ensure impacts to and from airports would be minimized. Therefore, potential impacts related to airport hazards would be **less than significant with mitigation incorporated**.

**Mitigation Measures**

The analysis provided in the certified General Plan EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measure HAZ-16 was implemented to reduce impacts related to airport hazards. This measure would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

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| f) | Result in a safety hazard for people residing or working in the project area for a project within the vicinity of a private airstrip or heliport? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.8.f) Approved Project Analysis.** Refer to Response to Checklist Question 4.8.e.

**2020 GHGRP Update Analysis.** Refer to Response to Checklist Question 4.8.e.

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| g) | Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.8.g) Approved Project Analysis.** Future development implemented through the GHGRP would include GHG reduction measures such as energy efficiency retrofits, renewable energy generation, and VMT reduction. These GHG reduction measures would not alter emergency response or evacuation plans. The GHGRP does not directly propose any changes or updates to existing emergency response or evacuation plans. Therefore, conflicts with existing emergency response and evacuation plans are not anticipated. Future development projects would be required to have adequate infrastructure and access as well as consistency with emergency and evacuation plans in order to ensure the safety of the County residents and environment. Furthermore, various elements within the General Plan contain policies that

relate to emergency response and evacuation plans, which would further reduce potential impacts of development on safety plans. Compliance with State, federal, and local regulations, along with General Plan Policies, would ensure that impacts related to emergency response and evacuation plans would be **less than significant.** No mitigation was required.

**2020 GHGRP Update Analysis.** The GHG reduction measures of the 2020 GHGRP Update would not alter emergency response or evacuation plans. The County would review any future development for consistency with emergency response and evacuation plans. It is unlikely that any actions would significantly interfere with adopted emergency response or evacuation plans. Furthermore, all future projects would be subject to further CEQA analysis of project- and site-specific impacts and mitigation proposed where applicable to reduce impacts regarding emergency response and plans. Consistent with the Approved Project, the 2020 GHGRP Update would comply with the existing regulations and updated Hazard policy (HZ-1.15) in the Countywide Plan which is equally effective as General Plan Policies. Impacts would be the same as those identified for the Approved Project (**less than significant**). No mitigation measures were identified in the General Plan EIR or GHGRP SEIR and no new mitigation measures are required for the 2020 GHGRP Update with regard to an adopted emergency response plan or emergency evacuation plan.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

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|---|---|---|---|---|---|
| h) | Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.8.h) Approved Project Analysis.** All development in the County is required to have clearance around structures, fire-resistant groundcover, and fire-resistant roofing materials to reduce the potential impacts of wildfires. In addition, none of the future development would result in significant impacts related to wildland fires as long as new development is reviewed by the County and the San Bernardino County Fire Department and complies with California Fire Code. Future development would be reviewed by the County for adherence to the building and fire codes. Overall, implementation of existing regulations and policies, including standards for roadways and access, development siting, and use of fire-resistant building materials would ensure that impacts related to wildland fire risks would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** Any future development projects that would be implemented in accordance with the 2020 GHGRP Update would be subject to all applicable County regulations and policies regarding wildfire safety. Such measures may include

clearance around structures, fire-resistant groundcover, and fire-resistant roofing materials to reduce the potential impacts of wildfires. Impacts related to wildland fire hazards would be the same as those identified for the Approved Project, which is **less than significant**. No mitigation is required.

### Mitigation Measures

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

### Conclusion and Findings for Hazards and Hazardous Materials

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated since the SEIR of the Approved Project was certified in 2011.

- Would the 2020 GHGRP Update create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- Would the 2020 GHGRP Update create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- Would the 2020 GHGRP Update emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- Would the 2020 GHGRP Update be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- Would the 2020 GHGRP Update be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
- Would the 2020 GHGRP Update impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- Would the 2020 GHGRP Update expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Hazards and hazardous materials impacts pertaining to the 2020 GHGRP Update would be equal to or less than those of the Approved Project that was concluded in the certified 2011 SEIR. The conclusions verifying that an Addendum to the certified 2011 SEIR is the proper CEQA documentation for the 2020 GHGRP Update are presented below.

### No Substantial Project Revisions Requiring Major SEIR Revisions

The 2020 GHGRP Update would have no impacts related to hazards and hazardous materials. Consequently, there are no substantial project revisions that would require substantial

changes to the analysis or findings of the revisions to the certified 2011 SEIR of the Approved Project.

**No Substantial Change in the Physical Environment or Regulations Requiring Major SEIR Revisions**

There have been no substantial changes in the physical environment or in the regulations associated with hazards and hazardous materials; thus, no substantial changes in the physical environment or regulations require major revision to the certified 2011 SEIR.

**No New Information Showing New or Substantially More Severe Significant Effects than in the Certified SEIR**

There is no new information showing new or substantially more severe significant effects associated with hazards and hazardous materials than in the certified 2011 SEIR. As such, no revisions to the certified 2011 SEIR are required.

**No Substantial Changes in the Mitigation Measures or Alternatives**

There are no substantial changes to the mitigation measures or alternatives approved in the certified 2011 SEIR relative to hazards and hazardous materials.

## 4.9 HYDROLOGY / WATER QUALITY

Would the project:

| | | | | | |
|---|---|---|---|---|---|
| a) | Violate any water quality standards or waste discharge requirements? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.9.a) Approved Project Analysis.** Future development through implementation of the GHGRP SEIR could result in changes to existing impervious surfaces by construction activities. GHG reduction measure-related development that involves ground disturbance, such as renewable energy generation and traffic flow management, could adversely affect water quality. To avoid water quality impacts, a Storm Water Pollution Prevention Plan (SWPPP) under National Pollutant Discharge Elimination System (NPDES) No. CA5618036 would be required for all development activities. Compliance with the County-approved grading permits and the State Water Resource Control Board (SWRCB) General Construction Activity Stormwater Permit would ensure potential risk of water degradation from erosion would be reduced. In addition, several federal and State laws, including CWA, NPDES, and California Porter-Cologne Water Quality Control Act, and General Plan Policies are enacted to reduce impacts to water quality and wastewater. With the implementation of regulations, General Plan Policies, and permits, implementation of the General Plan EIR and GHGRP SEIR would

occur in compliance with applicable water quality standards and waste discharge requirements to ensure impacts on water quality would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** Future development in accordance with the 2020 GHGRP Update would be subject to the same federal, State, and local regulations, and Countywide Plan Natural Resource Policy NR-2.4 to ensure compliance with applicable water quality standards and waste discharge requirements. Therefore, compliance with regulations and Countywide Plan Natural Resources Policy NR-2.4 would reduce any potential impacts that would violate water quality standards and waste discharge requirements to **less than significant**. No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

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|---|---|---|---|---|---|
| b) | Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.9.b) Approved Project Analysis.** Implementation of GHG reduction measures proposed could result in both short-term and long-term impacts to the County's water supply. During grading activities, water would be needed to suppress fugitive dust generated by construction equipment. It is possible that more than one project could be constructed simultaneously in areas with impacted groundwater basins. GHG reduction measures in the GHGRP, particularly roadway improvements including signal synchronization and traffic flow management are not likely to affect groundwater supplies by incrementally reducing groundwater recharge potential because they would be implemented in areas where development already occurs.

General Plan Policy CO 5.2 requires continued monitoring of the County's adjudicated groundwater basins to ensure a balanced hydrological system in terms of withdrawal and replenishment of water from groundwater basins. Most of the GHG reduction measure projects involve modification of existing facilities. Compliance with applicable federal and State regulations, including the Federal Clean Water Act, Federal Safe Water Drinking Act, California Porter-Cologne Water Quality Control Act, and CCR Title 22, would ensure any potential impacts to groundwater supplies would be reduced or avoided. Additionally, General Plan Policies and Mitigation Measure HWQ-3 would contribute to the reduction of potential impacts

to groundwater. Therefore, impacts to groundwater and groundwater recharge would be **less than significant with mitigation incorporated**.

The Approved Project was determined to result in potential significant impacts pertaining to groundwater recharge and groundwater supplies. As a result of these potentially significant impacts to groundwater resources in the area, the GHGRP SEIR for the Approved Project required implementation of the following mitigation measure:

**MM HWQ-3** The County shall require water reclamation systems and the use of reclaimed wastewater and other non-potable water to the maximum extent feasible for groundwater recharge projects.

**2020 GHGRP Update Analysis.** Implementation of the GHG reduction measures in the 2020 GHGRP Update would not result in a significant increase in the withdrawal of groundwater or groundwater recharge. The 2020 GHGRP Update provides water conservation measures that are geared toward conserving water through enhanced implementation of exceeding water efficiency standards. Future development would be required to adhere to federal and State regulations, Countywide Plan Water Supply Policies IU-1.3, IU-1.7 and IU-1.8 (which is equally effective as the policies cited in the Approved Analysis), along with Mitigation Measure HWQ-3, identified in the General Plan EIR and GHGRP SEIR concerning groundwater recharge and groundwater supplies. Therefore, potential impacts to groundwater recharge and groundwater supplies would be **less than significant with implementation of mitigation**.

**Mitigation Measures**

The analysis provided in the certified General Plan EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measure HWQ-3 was implemented to reduce impacts related to groundwater resources. This measure would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

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| c) | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.9.c) Approved Project Analysis.** Per the GHGRP SEIR, implementation of the Approved Project would consist of alterations, such as renewable energy generation systems, and roadway improvements including signal synchronization and traffic flow management. Those additions could potentially increase the overall footprint and therefore could potentially alter existing drainage patterns within the County. Projects would be required to comply with federal, State, and local regulations related to water quality, erosion, and storm water runoff.

Compliance with federal, State, and local regulations, including the CWA, California Porter-Cologne Water Quality Control Act, General Plan Policies, and Mitigation Measures HWQ-6 and 7, would reduce impacts from alteration of drainage patterns leading to erosion, sedimentation, and siltation to **less than significant with mitigation incorporated**.

The Approved Project was determined to result in potential significant impacts pertaining to alterations of drainage patterns. As a result of these potentially significant impacts in the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM HWQ-6** Drainage courses shall be kept in their natural condition to the greatest extent feasible to retain habitat and allow some recharge of groundwater basins and resultant savings. The feasibility of retaining features of existing drainage courses will be determined by evaluating the engineering feasibility and overall costs of the improvements to the drainage courses balanced with the extent of the retention of existing habitat and recharge potential.

**MM HWQ-7** The County shall seek to retain all natural drainage courses in accordance with the Flood Control Design Policies and Standards where health and safety are not jeopardized.

**2020 GHGRP Update Analysis.** Implementation of the 2020 GHGRP Update GHG reduction measures would not result in the same potential impacts as the Approved Project on existing drainage patterns, erosion, sedimentation, and siltation. Compliance with federal, State, and local regulations, and implementation of the updated General Plan which is known as the Countywide Plan Policies would reduce impacts from the proposed 2020 GHGRP Update related to alteration of drainage patterns leading to erosion, sedimentation and siltation. Therefore, impacts would be **less than significant.** No mitigation is required.

**Mitigation Measures**

The analysis provided in the certified General Plan EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measures HWQ-6 and 7 were implemented to reduce impacts related to groundwater resources. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

| | | | | | |
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| d) | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.9.d) Approved Project Analysis.** Implementation of the GHGRP could increase in surface runoff through the introduction of impermeable surfaces (roofs, pavements, roads, etc.). This

may cause hydrological changes that could expose people, structures, and property to increased flooding risks. Compliance with the CWA, NPDES, and General Plan Policies and programs would ensure impacts associated with alteration of drainage patterns or substantial increases in surface runoff would remain **less than significant.** No mitigation was required.

**2020 GHGRP Update Analysis.** Implementation of GHG reduction measures in the 2020 Update may result in alteration of drainage patterns or substantial increases in surface runoff, which may result in hydrological changes that could expose people, structures, and property to increased flooding risks. Consistent with the Approved Project, implementation of federal, State, and local regulations and policies in the updated General Plan which is known as the Countywide Plan Floodway and Water Policies IU-3.4 and NR-2.2 would ensure adverse effects associated with alteration of drainage patterns or substantial increases in surface runoff remain **less than significant**. No mitigation was identified in the GHGRP SEIR and no mitigation is required for the proposed 2020 GHGRP Update.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

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| e) | Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.9.e) Approved Project Analysis**. The GHGRP SEIR determined implementation of GHG reduction measures in the GHGRP would result in development that would substantially increase impermeable surfaces, which would limit the amount of groundwater infiltration during storm events. The passage of storm flows over impermeable surfaces would increase the volume and rate of storm runoff. Compliance with federal, State, and local regulations, including the CWA, NPDES permit, California Porter-Cologne Water Quality Act, and General Plan Policies and Programs, would reduce runoff from development accommodated by the Approved Project and ensure compliance with applicable water quality standards. Impacts would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** Future development with the implementation of 2020 GHGRP Update could potentially result in impermeable surfaces that would increase runoff exceeding storm water drainage system capacity. Consistent with the Approved Project, all future development in accordance with the 2020 GHGRP Update would be required to comply with applicable federal, State, and the Countywide Plan Storemwater Policies NR-2.5 and IU-3.1 to ensure runoff does not exceed infrastructure capacity or generate substantial additional sources of pollution. Therefore, the proposed 2020 GHGRP Update would be **less than significant**. No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

| | | | | | |
|---|---|---|---|---|---|
| f) | Substantially degrade water quality? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.9.f) Approved Project Analysis.** Per the GHGRP SEIR, future development associated with the implementation of Approved Project would not substantially degrade water quality or quality of drinking water in the County. The adverse effects on water quality would be reduced through compliance with applicable federal and State regulations, including the CWA, Federal Safe Drinking Water Act, California Porter-Cologne Water Quality Control Act, California Safe Drinking Water Act, and CCR Title 22, would reduce any potential impacts to water quality. Through compliance with the regulations and General Plan Policies and Programs, potential impacts related to water quality regarding compliance with the water quality standards would be **less than significant.** No mitigation was required.

**2020 GHGRP Update Analysis.** Implementation of GHG reduction measures in the 2020 GHGRP Update would not affect water quality. Implementation of the 2020 GHGRP Update would be subject to the same or superior Countywide Plan Water Quality Policies NR-2.1 and NR-2.2, and compliance with existing federal, State, and local laws and regulations prescribed for the Approved Project. Therefore, impacts on water quality associated with the 2020 GHGRP Update would be **less than significant**. No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

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| g) | Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.9.g) Approved Project Analysis.** The GHGRP SEIR determined future development in accordance with the Approved Project would not introduce any housing components within a

100-year flood hazard area. Therefore, impacts would be **less than significant.** No mitigation was required.

**2020 GHGRP Update Analysis.** As with the Approved Project, there would be no exposure of housing within a 100-year flood hazard area with implementation of GHG reduction measures in the 2020 GHGRP Update. Therefore, impacts would be **less than significant.**

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

| | | | | | |
|---|---|---|---|---|---|
| h) | Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.9.h) Approved Project Analysis.** The General Plan EIR and GHGRP SEIR determined the GHGRP could potentially result in development in 100-year flood hazard areas. Flooding hazards may occur that could inundate and cause water damage to structures. Impacts related to flooding may include the loss of life or property, and infrastructure damage. However, development would be subject to General Plan Policies and Programs S 5.1 Program 4 and 5, in order to not result in redirection of flood flows within the County. The County must submit a biennial report to the Federal Emergency Management Agency (FEMA) describing any changes in the community's flood hazard area, development activities that have taken place within the floodplain, and the number of floodplain residents and structures. Implementation of the Approved GHGRP GHG Reduction measures that would involve flood hazard areas would require coordination with San Bernardino County Flood Control and Water Conservation District. Therefore, compliance with federal, State, local regulations, General Plan Polices and Programs, including Mitigation Measure HWQ-10, would ensure potential impacts regarding flood hazards would be **less than significant with mitigation incorporated**.

The Approved Project was determined to result in potential significant impacts pertaining to alterations of Flood hazards. As a result of these potentially significant impacts in the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measure:

**MM HWQ-10** When development occurs, the County shall maintain the capacity of the existing natural drainage channels where feasible, and flood-proof structures to allow 100-year storm flows to be conveyed through the development without damage to structures.

**2020 GHGRP Update Analysis.** The 2020 GHGRP Update does not propose the development of buildings or structures. Therefore, the 2020 GHGRP Update does not expose people, structures, and property to increased flooding risks. Consistent with the Approved Project, implementation of federal, State, and updated Natural Hazards policies HZ-1.1, and 1.2 from the Countywide Plan, including Mitigation Measure HWQ-10, would ensure that development in accordance with the 2020 GHGRP Update would implement proper development standards in flood hazard areas to reduce or avoid such impacts. . Therefore, impacts from impediment of flows resulting from development in accordance with the 2020 GHGRP Update within flood hazard areas would be **less than significant.**

**Mitigation Measures**

The analysis provided in the certified General Plan EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measure HWQ-10 was implemented to reduce flood hazards. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

| | | | | | |
|---|---|---|---|---|---|
| i) | Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.9.i) Approved Project Analysis.** Future development accommodated by the GHGRP SEIR could potentially result in placement of structures within dam inundation zones, alluvial fan flooding zones, and other areas of potential flood hazard. Such development would be at greater risk of flood hazards should a dam, levee, debris basin, or other critical flood control structure fail. As a result, people, structures, and property could be exposed to increased flooding risks due to failure of flood control structures. With that, compliance with relevant federal, State, and County regulations, including National Flood Insurance Act and National Flood Insurance Reform Act, General Plan Policies would ensure potential impacts from levee or dam failure remain **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** Implementation of 2020 GHGRP Update would not expose people or structures to significant risk or loss due to flooding, as a result of the failure of a levee or dam. Compliance with relevant federal, State, and local regulations, National Flood Insurance Act, National Flood Insurance Reform Act and the updated General Plan, which is known as the Countywide Plan Natural Hazards Policies HZ-1.1 and HZ-1.2 would ensure adverse effects associated with dam inundation remain **less than significant**. No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

| | | | | | |
|---|---|---|---|---|---|
| j) | Would the project expose people or structures to inundation by seiche, tsunami, or mudflow? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.9.j) Approved Project Analysis.** The County is at low risk from damage resulting from seiches or waves generated in bodies of water. According to the County of San Bernardino General Plan, the most likely area that could be subject to seiche is the Mountains region, which includes various lakes. Tsunamis are tidal waves that occur in coastal areas; therefore, since the County is not located in a coastal area, no impacts due to tsunamis would occur. Mudflow or debris flow can occur in areas with steep slopes, particularly areas with loose soils and denuded of vegetation when exposed to large amounts of precipitation, but the risk is low due to San Bernardino's topography. The San Bernardino County Flood Control District operates/maintains flood control and sediment detention basins within populated areas. Compliance with applicable federal, State, and County regulations and General Plan Policies, including the California Accidental Release Prevention Program, would reduce impacts from exposure of people or structures to a significant risk of inundation due to seiche, tsunami, or mudflow to **less than significant.** No mitigation was required.

**2020 GHGRP Update Analysis.** Implementation of the 2020 GHGRP Update would not result in or expose people to seiche, tsunami, or mudflow risks. Consistent with the Approved Project, compliance with regulations, updated Natural Hazards Policies HZ-1.1 and HZ-1.2 from the Countywide Plan, including California's Accidental Release Prevention Program, would reduce potential impacts from exposure of people or structures to a significant risk of inundation due to seiche, tsunami, or mudflow. Therefore, potential impacts would be **less than significant**. No mitigation is required.

### Mitigation Measures

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

### Conclusion and Findings for Hydrology/Water Quality

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated since the SEIR of the Approved Project was certified in 2011.

- Would the 2020 GHGRP Update violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?
- Would the 2020 GHGRP Update substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

- Would the 2020 GHGRP Update substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - Result in a substantial erosion or siltation on or off site?
  - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?
  - Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?
  - Impede or redirect flood flows?
- Would the 2020 GHGRP Update be located in flood hazard, tsunami, or seiche zones and risk release of pollutants due to project inundation?
- Would the 2020 GHGRP Update conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Hydrology and water quality impacts pertaining to the 2020 GHGRP Update would be equal to or less than those of the Approved Project that was concluded in the certified 2011 SEIR. The conclusions verifying that an Addendum to the certified 2011 SEIR is the proper CEQA documentation for the 2020 GHGRP Update are presented below.

**No Substantial Project Revisions Requiring Major SEIR Revisions**

There are no substantial project revisions that would require substantial changes to the analysis or findings of the revisions to the certified 2011 SEIR of the Approved Project.

**No Substantial Change in the Physical Environment or Regulations Requiring Major EIR Revisions**

There have been no substantial changes in the physical environment or in the regulations associated with hydrology/water quality; thus, no substantial changes in the physical environment or regulations require major revision to the certified 2011 SEIR.

**No New Information Showing New or Substantially More Severe Significant Effects than in the Certified EIR**

There is no new information showing new or substantially more severe significant effects on hydrology/water quality than in the certified 2011 SEIR. As such, no revisions to the certified 2011 SEIR are required.

**No Substantial Changes in the Mitigation Measures or Alternatives**

There are no substantial changes to the mitigation measures or alternatives approved in the certified 2011 SEIR relative to hydrology/water quality.

## 4.10 LAND USE AND PLANNING

Would the project:

| | | | | | |
|---|---|---|---|---|---|
| a) | Physically divide an established community? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.10.a) Approved Project Analysis.** Future development associated with the General Plan has the potential to increase urban uses in the County. However, the GHGRP does not include facilities that would physically divide established communities. Additionally, the County General Plan proposes to eliminate redundant policies and consolidate many other policies in order to be more concise in the delivery of sound guidance for future development. General Plan Policies CI 11.4, CI 11.5, LU 9.2, CO 2.1, and CO 2.3, designed to foster compatibility among differing land uses, would reduce land use impacts to established communities resulting from potential conflicts. Implementation of these policies would protect established communities, minimize disturbance or division, and would ensure potential impacts to established communities would not occur. The General Plan EIR evaluated impacts associated with the Land Use and Planning and identified no significant impacts. It was noted that the policies of the 2007 General Plan function as mitigation. General Plan Policies are mitigation in other topical areas while, for land use and planning, they are addressed as part of a project. No mitigation measures were required. The GHGRP SEIR did not evaluate the impacts due to Land Use and Planning as there were no significant impacts identified beyond what was discussed in the General Plan EIR. Therefore, there would be **no impact**. No mitigation was required.

**2020 GHGRP Update Analysis.** The proposed 2020 GHGRP Update does not include any site-specific designs, nor does it grant any entitlements for development that would have the potential to physically divide an established community in the County. Implementation of updated General Plan which is known as the Countywide Plan Land Use Policies LU-1.1, LU-2.3 and LU-2.7 would ensure impacts from physical division of established communities would be the same as those identified for the General Plan and Approved Project. Therefore, implementation of the 2020 GHGRP Update would have **no impacts** that could physically divide an established community. No mitigation is required.

### Mitigation Measures

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

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|---|---|---|---|---|---|
| b) | Conflict with any applicable land use plan, policy or regulation or agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.10.b) Approved Project Analysis.** Per the General Plan EIR, due to new, rewritten, and consolidated policies such as CI 11.4 and CI 11.5, there will be a less than significant land use impact due to the deletion of Policies BI-3, BI-4, D-45, and D-56. In addition, implementation of the 2007 General Plan may lead to potential conflicts with regional plans of other agencies such as the Airport Land Use Plans for County Airports and the Air Quality Attainment Plans for either of the Air Quality Management Districts. Conformance with those regional plans is presented in other sections of this EIR (e.g., Traffic Hazards and Air Quality). The General Plan EIR did not identify and significant impacts related to Land Use and Planning and did not provide any mitigation measures. The GHGRP furthers the goals and policies in the identified land use plans by providing specific measures and programs that reduce greenhouse gas emissions, improve air quality, and facilitate transit-oriented development, thus reducing VMT. The GHGRP facilitates mixed-use and transit-oriented development in identified corridors near transit, as identified in the County General Plan. The implementation of GHGRP was determined to not cause any significant impacts on Land Use and Planning, beyond what was identified in the General Plan. Therefore, the GHGRP SEIR determined the impacts to be **less than significant** and no mitigation was required.

**2020 GHGRP Update Analysis.** The proposed 2020 GHGRP Update continues to provide specific measures and programs that implement the goals within the AQMP, SCAG's RCPG, and RTP/SCS, County Zoning Code, and the Countywide Plan. Therefore, impacts are **less than significant.** No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

| | | | | | |
|---|---|---|---|---|---|
| c) | Conflict with any applicable habitat conservation plan or natural community conservation plan? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.10.c) Approved Project Analysis.** The GHGRP does not include changes that would affect the Habitat Conservation Plans (HCPs) within the County. Future development and County GHGRP implementation would be required to conform to all HCP requirements and develop mitigation for any biological effects before construction of projects pursuant to County ordinance. Therefore, the GHGRP would not conflict with any applicable HCPs. The GHGRP SEIR determined the impacts due to conflict with any applicable habitat conservation plan or natural community conservation plan to be **less than significant** and no mitigation was required.

**2020 GHGRP Update Analysis.** All projects in the County must be developed consistent with the General Plan and all other applicable land use plans, such as the Habitat Conservation Plans with or without development and implementation of the 2020 GHGRP Update. In the same manner as the Approved Project, the 2020 GHGRP Update would be subject to existing regulations, as well as updated Biological Resources policies NR-5.1 and 5.5 outlined in the updated General Plan which is known as the Countywide Plan, to ensure future development consistent with applicable County HCPs. Therefore, impacts related to conflicts with HCPs from implementation of the 2020 GHGRP Update would be the same as those for the Approved Project (i.e., **less than significant**) and no mitigation is required.

### Mitigation Measures

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

### Conclusion and Findings for Land Use and Planning

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated since the SEIR of the Approved Project was certified in 2011.

- Would the 2020 GHGRP Update physically divide an established community?
- Would the 2020 GHGRP Update cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Land Use and planning impacts pertaining to the 2020 GHGRP Update would be equal to or less than those of the General Plan EIR and GHGRP SEIR. The conclusions verifying that an Addendum to the GHGRP SEIR is the proper CEQA documentation for the 2020 GHGRP Update are presented below.

### No Substantial Project Revisions Requiring Major SEIR Revisions

The 2020 GHGRP Update would have no impacts associated with land use and planning, which is the same as the Approved Project. Consequently, there are no substantial project revisions that would require substantial changes to the analysis or findings of the 2007 General Plan EIR and 2011 SEIR of the Approved Project.

**No Substantial Change in the Physical Environment or Regulations Requiring Major SEIR Revisions**

There have been no substantial changes in the physical environment or in the regulations associated with land use and planning; thus, no substantial changes in the physical environment or regulations require major revision 2007 General Plan EIR or the 2011 GHGRP SEIR.

**No New Information Showing New or Substantially More Severe Significant Effects than in the Certified SEIR**

There is no new information showing new or substantially more severe significant effects related to land use and planning than in the 2007 General Plan EIR, and further GHGRP SEIR. As such, no revisions to GHGRP SEIR are required.

**No Substantial Changes in the Mitigation Measures or Alternatives**

There are no substantial changes to the mitigation measures or alternatives approved in the certified 2011 SEIR relative to land use and planning.

## 4.11 MINERAL RESOURCES

Would the project:

| | | | | | |
|---|---|---|---|---|---|
| a) | Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.11.a) Approved Project Analysis.** The County General Plan EIR determined that significant unmitigated impacts to mineral resources could occur in the event that a future incompatible land use is permitted on or near a significant mineral resource prior to identification and classification of the resource. The General Plan EIR evaluated the impacts due to General Plan implementation on Mineral Resources and developed Mitigation Measures MR-1 through 5. The GHGRP SEIR, determined that the impacts identified related to Mineral Resources due to GHGRP implementation are not significant beyond what is described in the General Plan EIR. Therefore, impacts would be **less than significant with mitigation incorporated.** No additional mitigation measures were required beyond what was described in the General Plan EIR.

The Approved Project was determined to result in potential significant impacts pertaining to mineral resources. As a result of these potentially significant impacts to mineral resources in the area, the GP EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM MR-1** The County shall protect the current and future extraction of mineral resources that are important to the County's economy while minimizing impacts of this use on the public and the environment.

**MM MR-2** In areas containing valuable mineral resources, the County shall establish and implement conditions, criteria and standards that are designed to protect the access to, and economic use of, these resources, provided that the mineral extraction does not result in significant adverse environmental effects and that open space uses have been considered for the area once mining operations cease.

**MM MR-3** The County shall incorporate the mineral classification or designation information, including the maps, when they are completed by the State Mining and Geology Board and the Division of Mines and Geology, including new and updated information in the updated County General Plan.

**MM MR-4** The County shall recognize and protect areas within San Bernardino County that show or have proven to have significant mineral resources and protect their access. The Infrastructure Map, one of the layers of the General Plan mapping system, will be amended to identify mine sites that have a long-term operational horizon.

**MM MR-5** The County shall implement the State Mineral Resource Zone designations to establish a system that identifies mineral potential and economically viable reserves.

**2020 GHGRP Update Analysis.** As with the Approved Project, implementation of the 2020 GHGRP Update would not result in a loss of locally important mineral resources due to GHGRP implementation beyond what was evaluated in the General Plan EIR; therefore, no new mitigation measures are required, in addition to what is included in the General Plan EIR. Impacts would be **less than significant with mitigation incorporated.**

### Mitigation Measures

The analysis provided in the certified General Plan EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measures MR-1 through 5 were implemented to reduce impacts to Mineral Resources. These measures would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

| | | | | | |
|---|---|---|---|---|---|
| b) | Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State of California? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.11.b) Approved Project Analysis.** The GHGRP SEIR states that the impacts on Mineral Resources due to GHGRP implementation will not be significant beyond what was described in the General Plan EIR. Future development in accordance with the 2011 GHGRP would not change any of the General Plan land use designations that would affect compatibility of various land uses with mining activities. Therefore, there would be no loss of regionally important mineral resources in the County land use designations. Impacts are **less than significant** and no new mitigation measures were required.

**2020 GHGRP Update Analysis.** Consistent with the Approved Project, the 2020 GHGRP Update would not have significant impact on regionally important mineral resources beyond what was evaluated in the General Plan EIR. Future development in accordance with the 2020 GHGRP Update would not change any of the General Plan land use designations of the Approved Project that would affect compatibility of various land uses with mining activities. Therefore, there would be no loss of regionally important mineral resources in the County land use designations. Impacts are **less than significant** and no new mitigation is required.

### Mitigation Measures

There were no new impacts and mitigation measures identified for the Approved Project beyond what was evaluated in the General Plan This is also true for the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

### Conclusion and Findings for Mineral Resources

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated since the SEIR of the Approved Project was certified in 2011. However, the analysis presented in this Addendum has concluded that no impacts would occur in regard to the following Mineral Resources thresholds with implementation of the 2020 GHGRP Update:

- Would the 2020 GHGRP Update result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?
- Would the 2020 GHGRP Update result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State of California?

Mineral resources impacts pertaining to the 2020 GHGRP Update would be equal to or less than those evaluated in the General Plan EIR, as concluded in the Approved Project SEIR. The conclusions verifying that an Addendum to the GHGRP SEIR is the proper CEQA documentation for the 2020 GHGRP Update are presented below.

### No Substantial Project Revisions Requiring Major SEIR Revisions

The 2020 GHGRP Update would have no impacts on mineral resources, which is the same as the Approved Project. Consequently, there are no substantial project revisions that would

require substantial changes to the analysis or findings of the revisions to the General Plan EIR and GHGRP SEIR.

### No Substantial Change in the Physical Environment or Regulations Requiring Major SEIR Revisions

There have been no substantial changes in the physical environment or in the regulations associated with mineral resources; thus, no substantial changes in the physical environment or regulations require major revision to the GHGRP SEIR.

### No New Information Showing New or Substantially More Severe Significant Effects than General Plan EIR

There is no new information showing new or substantially more severe significant effects on mineral resources than in the 2007 General Plan EIR and 2011 GHGRP SEIR. As such, no revisions to the GHGRP SEIR are required.

### No Substantial Changes in the Mitigation Measures or Alternatives

The General Plan EIR identified mitigation measures to address the significant impacts on mineral resources due to General Plan implementation. The GHGRP SEIR did not analyze the impacts to mineral resources as it was determined that the GHGRP implementation will not cause any additional impacts on County's mineral resources beyond what was evaluated in the General Plan EIR. Therefore, there are no substantial changes to the mitigation measures or alternatives approved in the GHGRP SEIR relative to mineral resources.

## 4.12 NOISE

Would the project:

| | | | | | |
|---|---|---|---|---|---|
| a) | Expose of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☐ | ☒ |

**4.12.a) Approved Project Analysis.** Implementation of the GHGRP SEIR would include renewable energy and reduce VMT in the County, which would reduce a high amount of traffic noise levels. However, new development, particularly residential uses along and adjacent to major transit corridors, could be exposed to noise levels that exceed the County's noise standards. Existing sensitive uses would also be subject to these higher noise levels. All development, including energy-generating facilities, would be required to be designed in such a way as not exceed these noise standards. Therefore, energy-generating structures would likely be constructed away from sensitive uses and would not result in adverse noise impacts. Finally, the General Plan Policies N 1.1, and N 1.3 would ensure that noise impacts to sensitive uses would be avoided or minimized. Therefore, this impact would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** The 2020 GHGRP Update reduction measures are a continuation of the Approved Project measures that would further contribute to reducing GHG emissions within the County and include energy savings and VMT reduction. Implementation of 2020 GHGRP Update encourages GHG reduction measures and programs to further reduce VMT in the County, which would decrease traffic noise levels. In addition, GHG reduction measures would augment existing programs and policies with regard to transit-oriented development. Therefore, noise impacts associated with the 2020 GHGRP Update would not be significant. Compliance with updated policies from the Countywide Plan (Human-Generated Policies HZ-2.8 and HZ-2.9)(which are equally effective as the polices cited in the Approved Analysis) would ensure potentially adverse impacts related to noise generation and noise exposure associated with future development accommodated by the General Plan would be **less than significant**. No mitigation is required.

### Mitigation Measures

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

| | | | | | |
|---|---|---|---|---|---|
| b) | Result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.12.b) Approved Project Analysis.** The GHGRP SEIR determined construction vibration that could occur during energy-efficiency retrofit or installation of photovoltaic arrays or wind turbines could cause temporary, short-term vibrations. These vibrations would be disruptive if located near sensitive receptors. Compliance with the existing General Plan Policies would ensure that potentially adverse impacts related to groundborne noise and vibration generation and exposure associated with future new development accommodated by GHGRP SEIR would be less than significant. The temporary nature of the construction activity ensures that the vibration impacts, while possibly annoying, would not be significant. Therefore, impacts from vibration were determined to be **less than significant**.

**2020 GHGRP Update Analysis.** The 2020 GHGRP Update promotes the use of transit, but would not facilitate increased development of mass transit facilities. Construction vibration that could occur during energy efficiency retrofits would not be substantial. If these activities were to occur on or near fragile buildings, all appropriate policies outlined in the General Plan would control vibration from sources adjacent to residential and other sensitive receptors and ensure that future developments would be constructed to minimize interior and exterior noise and vibration levels. Compliance with the updated General Plan which is known as the Countywide Plan Policies would ensure that the structures would not generate excessive groundborne vibration or noise during operation. Therefore, impacts would be **less than significant**. No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

| | | | | | |
|---|---|---|---|---|---|
| c) | Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☐ | ☒ |

**4.12.c) Approved Project Analysis.** Refer to Response to Checklist Question 4.12.a.

**2020 GHGRP Update Analysis.** Refer to Response to Checklist Question 4.12.a.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

| | | | | | |
|---|---|---|---|---|---|
| d) | Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.12.d) Approved Project Analysis.** Future development accommodated by the GHGRP SEIR would require construction activities for commercial and industrial sources that could temporarily exceed applicable County standards at nearby noise-sensitive receptors. Although construction-generated noise levels would be short term, short-term significant increases in ambient noise levels could occur. In many cases, the peak sound levels would be brief and overall ambient noise levels would remain within acceptable limits. In addition, compliance with Construction Noise Standards as part of the San Bernardino's County Code, General Plan Policies N-1.1, N-1.3, and N-2.1 would ensure short-term construction noise levels would not result in substantial ambient noise levels. Following policies and standards, potential impacts would be **less than significant.** No mitigation was required.

**2020 GHGRP Update Analysis.** Potential construction activities from implementation of the 2020 GHGRP Update would include urban energy savings and transit infrastructure. These construction activities may result in temporary increases in noise; however, it is anticipated that activities would not require large construction equipment that would result in substantial noise. Following Noise Standards, County Code, and updated Human-Generated Hazards Policies HZ-2.8 and HZ-2.9 from the updated General Plan, which is known as the Countywide Plan would help reduce potential noise impacts. Therefore, noise impacts from implementation of the 2020 GHGRP Update would be **less than significant**. No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

| | | | | | |
|---|---|---|---|---|---|
| e) | Is the project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in the exposure of people residing or working in the project area to excessive noise levels? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.12.e) Approved Project Analysis.** Future development accommodated by the GHGRP may result in the exposure of sensitive receptors to increased noise levels. The Airport Land Use Commissions addresses noise-related land use surrounding the County's airports. All future development proposed would be required to comply with San Bernardino County's Airport Land Use Compatibility Plan regarding noise levels. Implementation of and compliance with federal, State, and local regulations, Federal Aviation Administration (FAA) standards, Airport Land Use Plans, General Plan Policy C1 8 1 Program 1, and Mitigation Measure N-4 would ensure that adverse airport noise impacts on new development accommodated by the GHGRP would be minimized to a level of less than significance. Therefore, impacts to sensitive receptors due to airport noise levels with implementation would be **less than significant with mitigation incorporated.**

The Approved Project was determined to result in potential significant impacts pertaining to alterations of Noise Resources. As a result of these potentially significant impacts in the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measure:

**MM N-4** The County shall submit all projects involving land use decisions on properties within airport influence areas to the Airport Land Use Commission for review.

**2020 GHGRP Update Analysis.** The 2020 GHGRP Update would not include strategies associated with airports and would not result in a significant impact on future air traffic operations. Compliance with federal, State, and local regulations, FAA standards, and updated Countywide Plan Hazards and Airports Policies HZ-2.6 and TM-6.4 (which are equally effective as the policies cited in the Approved Analysis), would ensure noise impacts within the vicinity of the airports would be reduced or avoided. Therefore, airport noise impacts generated from implementation of the 2020 GHGRP Update would be **less than significant**. No mitigation is required.

### Mitigation Measures

The analysis provided in the certified General Plan EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measure N-4 was implemented to reduce Noise-related impacts. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

| | | | | | |
|---|---|---|---|---|---|
| f) | Is the project within the vicinity of a private airstrip, result in the exposure of people residing or working in the project area to excessive noise levels? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.12.f) Approved Project Analysis.** Please refer to Response to Checklist 4.12.e.

**2020 GHGRP Update Analysis.** Please refer to Response to Checklist 4.12.e.

### Mitigation Measures

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

### Conclusion and Findings for Noise

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated since the SEIR of the Approved Project was certified in 2011.

- Would the 2020 GHGRP Update result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- Would the 2020 GHGRP Update result in generation of excessive groundborne vibration or groundborne noise levels?
- Would the 2020 GHGRP Update be located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Modified Project expose people residing or working in the area to excessive noise levels?

Noise impacts pertaining to the 2020 GHGRP Update would be equal to or less than those of the Approved Project that was concluded in the certified 2011 SEIR. The conclusions verifying that an Addendum to the certified 2011 SEIR is the proper CEQA documentation for the 2020 GHGRP Update are presented below.

### No Substantial Project Revisions Requiring Major SEIR Revisions

The 2020 GHGRP Update would have no impacts related to noise, which is the same as the Approved Project. Consequently, there are no substantial project revisions that would require substantial changes to the analysis or findings of the revisions to the certified 2011 SEIR of the Approved Project.

**No Substantial Change in the Physical Environment or Regulations Requiring Major SEIR Revisions**

There have been no substantial changes in the physical environment or in the regulations associated with noise; thus, no substantial changes in the physical environment or regulations require major revision to the certified 2011 SEIR.

**No New Information Showing New or Substantially More Severe Significant Effects than in the Certified SEIR**

There is no new information showing new or substantially more severe significant effects associated with noise than in the certified 2011 SEIR. As such, no revisions to the certified 2011 SEIR are required.

**No Substantial Changes in the Mitigation Measures or Alternatives**

There are no substantial changes to the mitigation measures or alternatives approved in the certified 2011 SEIR relative to noise.

## 4.13 POPULATION AND HOUSING

Would the project:

| | | | | | |
|---|---|---|---|---|---|
| a) | Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.13.a) Approved Project Analysis.** The GHGRP SEIR determined the County GHGRP would not result in substantial population growth, nor would it increase demand for housing within the County. The GHGRP would not exceed, directly or indirectly, local and regional growth projections. Since implementation of the GHGRP would not result in substantial population growth within the County, additional housing development would not be required for the Approved Project. In addition, the GHGRP SEIR determined that compliance with Mitigation Measures PH-1 through 19 identified in the General Plan EIR, would be sufficient to help reduce or avoid direct and indirect impacts from unanticipated growth. Impacts would be **less than significant with mitigation incorporated.** No new mitigation was required beyond what was included in the General Plan EIR.

The Approved Project was determined to result in potential significant impacts pertaining to population and housing. As a result of these potentially significant impacts to population and housing, the GP EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM PH-1** The County shall continue to utilize Planned Development density bonus and density transfer provisions as described in the County Development Code to allow creation of lot sizes less than that normally required by residential land use districts.

**MM PH-2** The County shall continue to allow mobile home parks in the Single Residential Land Use District at densities specified in the Development Code and in the Multiple Residential Land Use District subject to design guidelines, which will ensure compatibility with the natural environment while minimizing potential adverse environmental impacts.

**MM PH-3** The County shall continue the Community Development Block Grant single-family homeowner rehabilitation loan program in order to rehabilitate housing and improve neighborhoods.

**MM PH-4** The County shall use and update the County Rehabilitation Guide for inspection of existing renter- and owner-occupied dwelling units to facilitate economical and safe rehabilitation of housing.

**MM PH-5** The County shall contract with for-profit and non-profit developers and assist them in acquiring and rehabilitating vacant Housing and Urban Development and VA repossessed properties. These houses will be resold at affordable prices to first-time and other homebuyer families.

**MM PH-6** Because the preservation of existing housing stock is important in providing housing opportunities for all income levels, housing and community rehabilitation programs shall be established and implemented through the following action programs.

**MM PH-7** The County shall preserve units at risk of being lost to lower income households through completion of their federal subsidies and affordability covenants or contracts by developing various kinds of incentives or other programs.

**MM PH-8** The County shall preserve historic structures through the use of various federal and state tax incentive and other programs.

**MM PH-9** The County shall continue to implement the Housing Incentives Program such that it would encourage the phasing of affordable housing in large planned developments when the density bonus incentive has been implemented.

**MM PH-10** The County shall identify and use surplus public land to assist in the provision of housing that is affordable to lower income groups.

**MM PH-11** The County shall identify sites for affordable housing in the various planning regions of the County.

**MM PH-12** The County shall continue to pursue opportunities to acquire and "bank" sites, as necessary, to be used for affordable housing.

**MM PH-13** The County shall continue to integrate all aspects of housing assistance and development planning within the Consolidated Plan, consistent with the broader County General Plan and Development Code, and Community Plans in

order to identify the existing inventory as well as proposed locations for affordable housing.

**MM PH-14** The County shall continue to allow emergency and transitional shelters in any land use district with the appropriate permits, and concurrently develop the appropriate location and design standards for such uses.

**MM PH-15** Because of the various lifestyles and population characteristics of the County's residents, a variety and balance of housing types and densities shall be provided, through the General Plan Update, to require that all new planning area or specific plan studies provide housing types and densities commensurate with demonstrated lifestyles, projected needs, and population characteristics of the individual planning area.

**MM PH-16** Because it is desirable to optimize use of and limit adverse impacts on existing infrastructure and natural resources such as open space and air quality, more intensive residential development shall be encouraged in areas close to major transportation corridors where the infrastructure already exists and/or is underutilized, through the following actions-programs.

**MM PH-17** The County shall identify areas of the County where urban infill is appropriate, and encourage their development through the use of various incentives.

**MM PH-18** In the unincorporated areas of the County, the County shall designate residential land use districts within close proximity (three to five miles) of major transportation corridors. The more intensive residential land uses (RS and RM) shall be designated in urbanized areas, and less intensive residential land uses (RS-1, RL-2.5, etc.) in the more rural areas.

**MM PH-19** Throughout the County, the County shall continue to encourage mixed-use development through the Planned Development process that includes dense, multiple-family residential developments as well as clustered, single family residential development, and other uses which provide convenient shopping and employment opportunities close to major transportation corridors.

**2020 GHGRP Update Analysis.** Implementation of GHGRP Update would not result in population growth. Moreover, the 2020 GHGRP Update does not propose to grant any entitlements for development that would have a direct effect on population or housing in the County. Accordingly, effects related to population growth from implementation of the 2020 GHGRP Update would be **less than significant.** No mitigation is required.

### Mitigation Measures

The analysis provided in the certified General Plan EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measures PH-1 through 19 were implemented to reduce impacts related to population and housing. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

| | | | | | |
|---|---|---|---|---|---|
| b) | Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.13.b) Approved Project Analysis.** The GHGRP SEIR determined implementation of the GHGRP would neither displace existing housing or people nor necessitate construction of replacement housing elsewhere. The General Plan EIR evaluated the impacts associated with population and housing and developed Mitigation Measures PH-1 through 19 (see Response to Checklist Question 4.13.a, above) to mitigate the impacts to a level below significance. Therefore, impacts would be **less than significant with mitigation incorporated.**

The Approved Project was determined to result in potential significant impacts pertaining to Population and Housing. As a result of these potentially significant impacts to Population and Housing in the area, the GP EIR and GHGRP SEIR for the Approved Project required implementation of the mitigation measures listed in the Response to Checklist Question 4.13.a.

**2020 GHGRP Update Analysis.** As with the Approved Project, implementation of GHG reduction measures of the 2020 GHGRP Update would not displace existing housing units or people, nor would it necessitate construction of replacement housing elsewhere. Implementation of the GHGRP Update would not produce any impacts to this resource. Since the 2020 GHGRP Update does not include development that would have an adverse effect on housing in the County, direct and indirect effects related to displacement of housing or people from implementation of the 2020 GHGRP Update would be **less than significant.** No mitigation is required.

**Mitigation Measures**

The analysis provided in the certified General Plan EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measures PH-1 through 19 were implemented to reduce impacts related to population and housing. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

| | | | | | |
|---|---|---|---|---|---|
| c) | Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.13.c) Approved Project Analysis.** Implementation of the GHGRP would neither displace substantial numbers of people nor necessitate construction of replacement housing elsewhere. The General Plan EIR evaluates the impacts associated with population and housing and developed Mitigation Measures to address those impacts to a level below significance. The GHGRP does not contain a housing component. Further, compliance with General Plan Policies and Mitigation Measures PH-1 through 19, as listed above in Response to Checklist Question 4.13.a, would avoid any impacts associated with the Approved Project. Therefore, impacts would be **less than significant with mitigation incorporated.**

**2020 GHGRP Update Analysis.** Consistent with the Approved Project, implementation of GHG reduction measures of the 2020 GHGRP Update would not displace substantial numbers of people, nor would it necessitate construction of replacement housing elsewhere. Compliance with General Plan Mitigation Measures PH-1 through 19 would ensure impacts associated with implementation of the 2020 GHGRP Update would be minimized or avoided. Since the GHGRP Update does not include development that would have an adverse effect on population or housing in the County, direct and indirect effects related to displacement of housing or people from implementation of the 2020 GHGRP Update would be the same as for the Approved Project (i.e., **less than significant with mitigation incorporated**).

### Mitigation Measures

The analysis provided in the certified General Plan EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measures PH-1 through 19 were implemented to reduce impacts related to Population and Housing. These measures would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

### Conclusion and Findings for Population and Housing

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated since the EIR of the General Plan which was certified in 2007.

- Would the 2020 GHGRP Update induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?
- Would the 2020 GHGRP Update displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

- Would the 2020 GHGRP Update displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Population and housing impacts pertaining to the 2020 GHGRP Update would be equal to or less than those of the General Plan EIR that was concluded in the 2011 GHGRP SEIR. The conclusions verifying that an Addendum to the 2011 GHGRP SEIR is the proper CEQA documentation for the 2020 GHGRP Update are presented below.

**No Substantial Project Revisions Requiring Major SEIR Revisions**

The 2020 GHGRP Update would have no impacts on population and housing, which is the same as the Approved Project. Consequently, there are no substantial project revisions that would require substantial changes to the analysis or findings of the 2011 GHGRP SEIR of the Approved Project.

**No Substantial Change in the Physical Environment or Regulations Requiring Major SEIR Revisions**

There have been no substantial changes in the physical environment or in the regulations associated with population and housing; thus, no substantial changes in the physical environment or regulations require major revision to the 2011 SEIR.

**No New Information Showing New or Substantially More Severe Significant Effects than in the GHGRP SEIR**

There is no new information showing new or substantially more severe significant effects on population and housing than in the General Plan EIR and GHGRP SEIR. As such, no revisions to the GHGRP SEIR are required.

**No Substantial Changes in the Mitigation Measures or Alternatives**

The General Plan EIR identified mitigation measures for impacts on Population and Housing resulting from the implementation of County General Plan. There are no changes to the mitigation measures approved in the General Plan EIR relative to population and housing. The GHGRP SEIR concluded that no new mitigation measures will be required for implementing the GHGRP and this will apply to 2020 GHGRP Update as well.

## 4.14 PUBLIC SERVICES

Would the project:

| | | | | | |
|---|---|---|---|---|---|
| a) | Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, Or in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection and emergency medical response? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.14.a) Approved Project Analysis.** Per the GHGRP SEIR, future development associated with the implementation of the Approved Project could potentially result in interference with fire and emergency response times. Population growth would increase in the County with or without development and implementation of the GHGRP. To reduce such impacts of future growth in the County on fire and emergency response, compliance with regulations and General Plan Policies would be required. The General Plan EIR and GHGRP SEIR finds that compliance with General Plan Policy S-3.1, following S-3.1 Program 4 through 8 and Mitigation Measures PS-4, 5, 6, and 7 would ensure impacts remain less than significant. Therefore, impacts regarding fire and emergency response services would be **less than significant with mitigation incorporated.**

The Approved Project was determined to result in potential significant impacts pertaining to public services. As a result of these potentially significant impacts to fire protection and emergency medical services in the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM PS-4** The County shall protect its residents and visitors from injury and loss of life and protect property from fires through the continued improvement of existing Fire Department facilities and the creation of new facilities, but also through the improvement of related infrastructure that is necessary for the provision of fire service delivery, such as water systems and transportation networks.

**MM PS-5** The County shall create a Fire Master Plan that can be used to identify areas in the County that are in need of increased levels of fire service delivery and thereby identify geographic areas that are in need of infrastructure improvements so that those areas can take the necessary steps to improve that infrastructure and eventually can adequately support the commensurate improvement in fire service delivery.

**MM PS-6** The County shall encourage development in areas that have adequate infrastructure for the provision of fire service that include, but are not limited to, water system infrastructure that is capable of delivering appropriate fire flow and transportation networks that can provide access for fire apparatus and other emergency response vehicles as well as provide efficient egress for evacuees.

**MM PS-7** The County shall create Community Facilities District or other long-term financial instruments within proposed developments and areas available for development to provide a fair-share funding mechanism to support pro-rata increases for the provision of long-term fire protection. The Community Facilities Districts should be designed to provide sustained long-term levels of staffing operations, equipment, and facilities. The Community Facilities Districts should also be designed specifically to the impacts of the related development and thereby to minimize the impact to the general fund and other existing funding mechanisms that support the Fire Department.

**2020 GHGRP Update Analysis.** As with the Approved Project, there would be no increase in demand for fire protection and emergency medical response services since GHG reduction measures would not include development that would increase population. The 2020 GHGRP Update does not propose GHG reduction measures that would result in interference with fire protection and emergency medical services response times. Compliance with State and local regulations, along with the Countywide Plan, would ensure impacts remain less than significant. Therefore, impacts related to fire and emergency response services would be **less than significant.**

### Mitigation Measures

The analysis provided in the certified General Plan EIR and GHGRP SEIR of the Approved Project determined that Mitigation Measures PS-4 through PS-7 were implemented to reduce impacts related to fire protection and emergency medical services. These measures would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

| | | | | | |
|---|---|---|---|---|---|
| b) | Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any law enforcement services? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.14.b) Approved Project Analysis.** Per the GHGRP SEIR, future development associated with the implementation of the Approved Project could potentially result in interference with law enforcement response times. Population growth and human activity would increase in the County with or without development and implementation of the GHGRP. San Bernardino County has a higher crime rate than the State average; therefore, crime is one of the main concerns among residents. To reduce such impacts of future growth in the County, compliance with regulations and General Plan Policies would be in order. The General Plan EIR finds that compliance with Mitigation Measures PS-1, 2, and 3 would ensure impacts remain less than significant. Therefore, impacts related to law enforcement services through implementation of the GPEIR would be **less than significant with mitigation incorporated.**

The Approved Project was determined to result in potential significant impacts pertaining to public services. As a result of these potentially significant impacts to law enforcement services in the area, the General Plan EIR for the Approved Project required implementation of the following mitigation measures:

**MM PS-1** The County shall provide adequate law enforcement facilities to deliver services to deter crime and to meet the growing demand for services associated with increasing populations and commercial/industrial developments.

**MM PS-2** The County shall seek and commit sufficient investigative resources for effective follow-up on criminal offenses.

**MM PS-3** The County shall assess and update training and equipment needs on a routine basis when possible to ensure policing methods are effectively executed while minimizing unnecessary liability.

**2020 GHGRP Update Analysis.** Increases in demand for law enforcement services would occur through buildout of the General Plan EIR with or without development and implementation of the 2020 GHGRP Update. The proposed 2020 GHGRP Update would not result in any additional or more severe impacts than those associated with the Approved Project from increased demand for law enforcement services. Therefore, compliance with State and local regulations, along with Mitigation Measures PS-1, 2, and 3 prescribed for the Approved Project, would be required for the 2020 GHGRP to reduce impacts to **less than significant with mitigation incorporated.**

### Mitigation Measures

The analysis provided in the certified General Plan EIR and SEIR of the Approved Project determined that Mitigation Measures PS-1 through PS-3 would be implemented to reduce impacts to law enforcement services. These measures would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

| | | | | | |
|---|---|---|---|---|---|
| c) | Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for schools? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.14.c) Approved Project Analysis.** According to the General Plan EIR, student populations and demand on school services would increase. The localized development increases would incrementally generate additional students, creating demand for additional school facilities and services personnel in specific areas, particularly within the Special Education Local Plan Areas in the County. With compliance with existing regulations, General Plan Policy, and Mitigation Measure PS-9, the anticipated increase in demand would be reduced below a level of significance. Therefore, impacts to the environment from increased demand on school facilities would be less **than significant with mitigation incorporated.**

The Approved Project was determined to result in potential significant impacts pertaining to public services. As a result of these potentially significant impacts to school services, the General Plan EIR for the Approved Project required implementation of the following mitigation measure:

**MM PS-9** The County shall provide convenient access to K–12 and higher educational opportunities for all, activities for youth, and programs for residents of all ages.

**2020 GHGRP Update Analysis.** Increases in demand for school services would occur through buildout of the General Plan EIR with or without development and implementation of the 2020 GHGRP Update. The proposed 2020 GHGRP Update would not result in any additional or more severe impacts than those associated with the Approved Project. Therefore, compliance with State and local regulations, along with Mitigation Measure PS-9 prescribed for the Approved Project, would be required for the 2020 GHGRP to reduce impacts to **less than significant with mitigation incorporated.**

### Mitigation Measures

The analysis provided in the certified General Plan EIR of the Approved Project determined that Mitigation Measure PS-9 was implemented to reduce impacts related to school services. This measure would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

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| d) | Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or, in the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for any library services? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.14.d) Approved Project Analysis.** According to the General Plan EIR, there would be an increase in population, which would generate the need for additional public services within the County. This increase could potentially require additional library facilities. Provision of additional library facilities as provided by the Facilities Master Plan would provide for future County residents' library needs, reducing the impact of the future population growth. With compliance with existing regulations, General Plan Policy, and Mitigation Measure PS-8, the anticipated increase in demand would be reduced below a level of significance. Therefore, impacts regarding library services would be **less than significant with mitigation incorporated.**

The Approved Project was determined to result in potential significant impacts pertaining to libraries. As a result of these potentially significant impacts to library services, the General Plan EIR for the Approved Project required implementation of the following mitigation measure:

**MM PS-8** The County shall ensure that adequate school, library, and day-care facilities are available and approximately located to meet the needs of its residents.

**2020 GHGRP Update Analysis.** As with the Approved Project, demand for library services is based on population, which would increase and require additional public services. With compliance with existing regulations, updated policies from the Countywide Plan, and Mitigation Measure PS-8, anticipated increase in demand would be reduced below a level of significance. Therefore, impacts regarding library services would be **less than significant with mitigation incorporated.**

**Mitigation Measures**

The analysis provided in the certified General Plan EIR of the Approved Project determined that Mitigation Measure PS-8 was implemented to reduce impacts related to library services. This measure would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

### Conclusion and Findings for Public Services

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated since the EIR of the Approved Project was certified in 2007.

- Would the 2020 GHGRP Update result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:
  - Fire Protection?
  - Police Protection?
  - Schools?
  - Parks?
  - Other public facilities?

Public services impacts pertaining to the 2020 GHGRP Update would be equal to or less than those of the Approved Project that was concluded in the certified 2007 EIR. The conclusions verifying that an Addendum to the certified 2007 EIR is the proper CEQA documentation for the 2020 GHGRP Update are presented below.

### No Substantial Project Revisions Requiring Major EIR Revisions

The 2020 GHGRP Update would have no impacts on public services, which is the same as the Approved Project. Consequently, there are no substantial project revisions that would require substantial changes to the analysis or findings of the revisions to the certified 2007 EIR of the Approved Project.

### No Substantial Change in the Physical Environment or Regulations Requiring Major EIR Revisions

There have been no substantial changes in the physical environment or in the regulations associated with public services; thus, no substantial changes in the physical environment or regulations require major revision to the certified 2007 EIR.

### No New Information Showing New or Substantially More Severe Significant Effects than in the Certified EIR

There is no new information showing new or substantially more severe significant effects on public services than in the certified 2007 EIR. As such, no revisions to the certified 2007 EIR are required.

### No Substantial Changes in the Mitigation Measures or Alternatives

There are no substantial changes to the mitigation measures or alternatives approved in the certified 2007 EIR relative to public services.

## 4.15 RECREATION

Would the project:

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| a) | Cause growth that increases the use of existing neighborhood parks, regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.15.a) Approved Project Analysis.** Implementation of the GHGRP would not increase population growth, which would therefore not increase the number of residents that would be using existing neighborhood parks, regional parks, and recreational facilities, such as trails and bikeways, in the County. Furthermore, the GHGRP SEIR determined that there would be no increase in the use of recreational parks or facilities due to the implementation of the GHGRP and it would not cause any physical deterioration. In this regard, impacts would be **less than significant** and no new mitigation was required beyond what was evaluated in the General Plan EIR.

**2020 GHGRP Update Analysis.** As with the Approved Project, implementation of the 2020 GHGRP Update would not grant any entitlements for development, or propose to change existing land use designations or zoning that would increase population. Therefore, it would not change resident population growth or total jobs in the County's community or increase demand for parks and recreational facilities. Implementation of the 2020 GHGRP Update would not result in physical deterioration of neighborhood and regional parks and recreational facilities. Therefore, impacts would be **less than significant.**

### Mitigation Measures

There were no mitigation measures identified for the Approved Project beyond what was identified in the General Plan EIR. This is also true for the 2020 GHGRP Update; no mitigation is required.

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|---|---|---|---|---|---|
| b) | Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.15.b) Approved Project Analysis.** Please refer to Response to Checklist Question 4.15.a. Implementation of the GHGRP would not increase population growth, which would therefore not increase the demand for parks and recreation facilities in the County. Furthermore, the

GHGRP SEIR does not indicate any plan for construction of parks or recreational facilities that might have an adverse physical effect on the environment due to the implementation of the GHGRP. Therefore, impacts would be **less than significant.** No mitigation was required.

**2020 GHGRP Update Analysis.** As indicated in response to Checklist Question 4.15.a, implementation of the 2020 GHGRP Update would not change resident population in the County or increase demand for parks and recreational facilities. Therefore, the 2020 GHGRP Update would not demand construction or expansion of parks and recreational facilities that might have an adverse physical effect on the environment. In the same manner as the Approved Project, impacts would be **less than significant.** No mitigation is required.

### Mitigation Measures

There were no mitigation measures identified for the Approved Project beyond what was identified in the General Plan EIR. This is also true for the 2020 GHGRP Update; no mitigation is required.

### Conclusion and Findings for Recreation

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated since the SEIR of the Approved Project was adopted in 2011.

- Would the 2020 GHGRP Update increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- Does the 2020 GHGRP Update include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Recreation impacts pertaining to the 2020 GHGRP Update would be equal to or less than those of the Approved Project that was concluded in the 2011 GHGRP SEIR. The conclusions verifying that an Addendum to the 2011 GHGRP SEIR is the proper CEQA documentation for the 2020 GHGRP Update are presented below.

### No Substantial Project Revisions Requiring Major SEIR Revisions

There are no substantial project revisions that would require substantial changes to the analysis or findings of the revisions to the GHGRP SEIR of the Approved Project.

### No Substantial Change in the Physical Environment or Regulations Requiring Major EIR Revisions

There have been no substantial changes in the physical environment or in the regulations associated with recreation; thus, no substantial changes in the physical environment or regulations require major revision to the GHGRP SEIR.

### No New Information Showing New or Substantially More Severe Significant Effects than in the GHGRP SEIR

There is no new information showing new or substantially more severe significant effects on recreation than identified in the General Plan EIR. The GHGRP SEIR concluded that implementation of the GHGRP will not have any significant impacts beyond what is identified in the General Plan EIR. As such, no revisions to the GHGRP SEIR are required.

### No Substantial Changes in the Mitigation Measures or Alternatives

The General Plan EIR identified following mitigation measures for impacts on recreation resulting from the implementation of County General Plan.

**MM REC-1** The County shall support the establishment of "urban open space areas" within urban areas, and seek to develop or retain these areas through cooperation with local cities. Where possible, these areas shall be located along or near regional trail routes.

**MM REC-2** The County shall strive to achieve a standard of 14.5 acres of undeveloped lands and/or trails per 1,000 population and 2.5 acres of developed regional parkland per 1,000 populations. "Undeveloped lands" may include areas established to buffer regional parks from encroachment by incompatible uses.

**MM REC-3** When specific projects are reviewed which exhibit natural features worthy of regional park land status, the County shall require the dedication of these lands when recommended by the Regional Parks Department and approved by the Board of Supervisors.

**MM REC-4** The County shall ensure that the variety of recreational experiences at Regional Park sites meets the needs of the region.

**MM REC-5** The County shall require new residential development to provide a park and recreation facilities at a rate of not less than 3 acres per 1,000 population. This could include the dedication of lands, payment of fees, or a combination thereof.

**MM REC-6** The County shall implement the Quimby Act (Gov. Code Section 66477) through the subdivision process in providing for local opportunities (both passive and active).

**MM REC-7** Areas in new developments that are not suitable for habitable structures shall be offered for recreation, other open space uses, trails, and scenic uses. Retention of open space lands shall be considered with modifications to a site to increase its buildable area. Potential measures used to set aside open space lands of all types include dedication to the County or an open space agency, dedication or purchase of conservation easements, and transfer of development rights.

**MM REC-8** In addition to parkland to meet the 3 acres per 1,000 local park standard, large-scale housing projects in the Valley Region with 100 or more units shall

provide on-site recreational facilities, including pools, tennis courts and turfed play areas and tot-lots.

**MM REC-9** The County shall classify local parks in three categories: Local, Neighborhood and Community Parks, and establish size and location standards as follows:

**Local Park:** A small walk-in park, up to five acres, serving a concentrated or limited population, particularly children, within a quarter mile radius.

**Neighborhood Park:** A walk-in park, up to 10 acres, with a service radius of a half mile. Serves a neighborhood and provides a passive recreation location for all age groups.

**Community Park:** A walk-in, drive to park, up to 40 acres, which includes areas for intense recreational facilities and serves a combination of neighborhoods within a 1–2 mile radius.

**MM REC-10** The County shall expand its trail systems for pedestrians, equestrians, and bicyclists to connect with the local, State, and federal trail systems.

**MM REC-11** The County shall provide a regional trail system, plus rest areas, to provide continuous interconnecting trails that serve major populated areas of the County and existing and proposed recreation facilities through the regional trail system. The purpose of the County regional trails system shall be to provide major backbone linkages to which community trails might connect. The provision and management of community and local trails will not be the responsibility of the regional trail system.

**MM REC-12** The County shall provide equestrian, bicycling, and pedestrian staging areas consistent with the master plan of Regional Trails and the trail route and use descriptions shown in Figures 2-11A through 2-11C of the Circulation Background Report.

**MM REC-13** The County shall work with local, State, and federal agencies, interest groups and private landowners in an effort to promote an interconnecting regional trail system; and to secure trail access through purchase, easements or by other means.

**MM REC-14** The County shall utilize public funding mechanisms whenever possible to protect and acquire lands for open space uses.

**MM REC-15** The County shall actively seek state, federal, and private grants for the purpose of financing open space and trail acquisition, construction and operation.

**MM REC-16** The County shall use general funds, user fees, proceeds from concession operations and other sources that may be available to finance open space and trail acquisition, construction and operation.

**MM REC-17** The County shall include open space and trail acquisition and development in its Capital Improvement Programs.

**MM REC-18** The County shall locate trail routes to highlight the County's recreational and educational experiences, including natural, scenic, cultural and historic features.

**MM REC-19** The County shall use lands already in public ownership or proposed for public acquisition, such as right-of-way for flood control channels, abandoned railroad lines and fire control roads for trails wherever possible, in preference to private property.

**MM REC-20** The County shall encourage the dedication or offers of dedication of trail easements where appropriate for establishing a planned trails system alignment, or where an established trail is jeopardized by impending development or subdivision activity.

**MM REC-21** The County shall monitor all dedicated public trails and/or easements on a continuing basis and maintain an up-to-date map of all existing and proposed dedicated public trail easements on the Resources Overlay. Existing trail easements or alignments shall be mapped in their correct positions; proposed alignments shall be mapped in general locations. The Resources Overlay shall be reviewed during consideration of applications for permits or development approvals to ensure that new development does not result in loss of existing or potential public use of dedicated easements.

**MM REC-22** The County shall use active and abandoned road, utility, and railroad rights-of-way for non-vehicular circulation in all new development when found feasible.

**MM REC-23** The County shall require proposed development adjacent to trail systems to dedicate land for trailhead access points. Existing right-of-way and surplus public properties should be utilized for these staging areas whenever possible.

**MM REC-24** The County shall begin acquisition of trail easements or rights-of-way after a trail route plan has been adopted, unless a trail segment is to be acquired through dedication in conjunction with development activity or acts of philanthropy that occur prior to adoption of a route plan.

**MM REC-25** The County shall develop multipurpose regional open spaces and advocate multi-use access to public lands including national parks, national forests, state parks, and Bureau of Land Management areas.

**MM REC-26** To preserve and protect recreational facilities in the County, the County shall utilize public funding mechanisms wherever possible to protect and acquire regional park lands.

**MM REC-27** To expand recreational opportunities in the County, the County shall utilize small parcels adjacent to flood control facilities for equestrian, pedestrian, and biking staging areas. The County Department of Public Works shall contact the Regional Parks Department or other County open space agency prior to disposing of any surplus lands.

There are no changes to the mitigation measures approved in the General Plan EIR relative to recreation. The GHGRP SEIR concluded that no new mitigation measures will be required for implementing the GHGRP beyond identified in the General Plan EIR and this will apply to 2020 GHGRP Update as well.

## 4.16 TRANSPORTATION/TRAFFIC

Would the project:

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| a) | Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections). | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☐ | Reduced Impact ☒ |

**4.16.a) Approved Project Analysis.** The GHGRP SEIR determined implementation of the GHGRP would reduce GHG emissions and vehicle miles traveled (VMT) by reduction measures such as VMT reduction strategies, construction of vehicle lanes for high occupancy vehicles, and roadway improvements including signal synchronization and traffic flow management. None of these GHG reduction measures would cause new traffic; rather, they would relieve existing traffic load and capacity of the street system. Reduction measure Regional Land Use and Transportation Coordination is intended to reduce passenger vehicle travel in order to decrease traffic levels in the County. In addition, there are numerous General Plan Policies that ensure VMT reduction through greater transit opportunities and ridership in the County. Compliance with federal and State regulations, Development Code Chapter 83.14, General Plan Policies and Programs including CI 4.2 Program 1, CI 4.6, and County Policies V/CI 1.1, D/CI 1.1, and M/CI 1.1 would ensure potential traffic impacts would be minimized or avoided. Further, because of County review of transit and non-motorized infrastructure to ensure that these improvements do not negatively affect the traffic flow on roadways, the implementation of the GHGRP would not conflict with traffic capacity in the County. Therefore, impacts would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** The proposed changes in the 2020 GHGRP Update include enhanced GHG reduction measures compared to the approved GHGRP. The measures include further increasing the availability of transit service, adding additional bicycle infrastructure, and roadway improvements like signal synchronization. The implementation of each of these measures would result in a reduction in traffic loads, which would reduce the number of vehicle trips, volume-to-capacity ratio, and intersection congestion within the County. Furthermore, none of the measures would directly increase traffic in relation to the existing traffic load and capacity of the system. Therefore, potential impacts would be **less than significant.** No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

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| b) | Exceed, either individually or cumulatively, a level of service standard established by the County congestion management agency for designated roads or highways? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☐ | Reduced Impact ☒ |

**4.16. b) Approved Project Analysis.** With the implementation of Approved Project, per the GHGRP SEIR, many intersections in the County operate at Level of Service (LOS) D within the County through Policies V/CI 1.1, D/CI 1.1, and M/CI 1.1. Future Transit and non-motorized transportation infrastructure would be built on Congestion Management Plan (CMP) roadways and would involve temporary traffic increases due to construction but would end once construction is completed. However, Reduction Measure R3T4 could achieve a reduction of VMT but doing so could increase traffic congestion due to increased development density. The General Plan would not adversely affect the local CMP and does, in fact, include policies to support the goals and objectives of the CMP. Compliance with federal, State, and County Development Code Chapter 83.14 and Mitigation Measures TR-2, 3, 5, and 16 would partially address potential impacts. However, General Plan Policies and mitigation measures would not fully address these potential impacts, nor would the proposed revisions fully mitigate these impacts. Therefore, the impacts to San Bernardino County roadways and highways were determined to be **significant and unavoidable.**

The Approved Project was determined to result in potential significant impacts pertaining to CMPs. As a result of these potentially significant impacts to the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM TR-2** The County shall strive to achieve Level of Service "D" on all County roadways in the Valley and Mountain Regions and LOS "C" on all County roadways in the Desert region. Through the review of new development proposals, traffic impacts, including cumulative impacts, will be properly addressed and mitigated to maintain these Level of Service standards on the County's circulation system.

**MM TR-3** In the Valley and Mountain Regions, the County shall approve development proposals only when they are consistent with the County's objective of achieving Level of Service "D" on County roadways segments and intersections affected by the development. Development proposals will strive to achieve the LOS "D" objective through incorporating design measures and roadway improvements in the proposed development and/or mitigation fees to the County to offset capital improvements to achieve the LOS "D" objective. In the

Desert Region, the County shall approve development proposals only when they are consistent with the County's objective of achieving Level of Service "C" on County roadways segments and intersections affected by the development. Development proposals will strive to achieve the LOS "C" objective through incorporating design measures and roadway improvements in the proposed development and/or mitigation fees to the County to offset capital improvements to achieve the LOS "C" objective.

**MM TR-5** The County shall work with Caltrans and SBCTA on appropriate fair-share mitigation for impacts of development on state highways.

**MM TR-16** The County shall limit, where feasible, access along all roads intersecting Major and Secondary Highways for a distance of 600 feet from the centerline of said Highways to the maximum extent possible.

**2020 GHGRP Update Analysis.** The new and enhanced GHG reduction measures proposed in the 2020 GHGRP Update would have a beneficial effect in alleviating congestion by reducing VMT and facilitating alternative modes of transportation and would not directly increase traffic in relation to the existing traffic load and capacity of the system. Therefore, implementation of the GHGRP Update would not produce any significant impacts. Therefore, impacts would be **less than significant.**

**Mitigation Measures**

The analysis provided in the certified General Plan EIR of the Approved Project determined that Mitigation Measures TR-2, 3, 5, and 16 were implemented to reduce impacts related to Transportation/Traffic. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures and impacts would be less than significant.

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| c) | Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.16.c) Approved Project Analysis.** Implementation of the Approved Project, as determined in the GHGRP SEIR, would involve expansion of existing facilities but not result in alterations of air traffic patterns or an increase in traffic levels or result in any substantial safety risks. However, there is potential for solar photovoltaic panel installation that could have a potential impact regarding air traffic patterns. To avoid such impacts, General Plan provision CI 8.1 is required, along with Chapters 84.26 and 84.29 of the Development Code that regulates height of wind generators and addresses land use compatibility. In addition, SEIR Mitigation Measure 3.1.2 would amend the County Development Code to include the standard that solar energy facilities shall be designed to preclude daytime glare on any right-of-way, which would include air traffic patterns. Compliance with federal, State, and local

regulations, including General Plan Policies and Programs and Mitigation Measure 3.1.2, would ensure that the GHGRP would not cause a substantial impact to air traffic patterns. Therefore, impacts would be **less than significant with mitigation incorporated.**

The Approved Project was determined to result in potential significant impacts pertaining to air traffic patterns. As a result of these potentially significant impacts to in the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM 3.1.2** Development Code Section 84.29.040 (Solar Energy Development Standards) shall be amended to include the following standard for glare:

- Solar energy facilities shall be designed to preclude daytime glare on any abutting residential land use zoning district, residential parcel, or public right-of-way.

**2020 GHGRP Update Analysis.** Consistent with the Approved Project, implementation could potentially consist of solar photovoltaic panel installation that could have a potential impact regarding air traffic patterns. Chapters 84.26 and 84. 29 of the Development Code would avoid such impacts from occurring. Additionally, SEIR Mitigation Measure 3.1.2 would be required to reduce daytime glare. The GHGRP Update would not result in substantial impacts related to air traffic patterns with compliance of federal, State, and local regulations, including General Plan Policies and Programs and Mitigation Measure 3.1.2. Therefore, impacts would be **less than significant with mitigation incorporated.**

**Mitigation Measures**

The analysis provided in the certified GP EIR of the Approved Project determined that Mitigation Measure 3.1.2 was required to reduce impacts related to transportation/traffic. This measure would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

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| d) | Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.16.d) Approved Project Analysis.** Implementation of the Approved Project, per the GHGRP SEIR, would not adversely affect any facilities that would substantially increase alterations that would create traffic hazards. With that said, all GHG reduction measures related to roadway improvements would be subject to County roadway design standards, which regulate features such as right-of-way widths and curb separation distance and would need to be consistent with the *Caltrans Highway Design Manual*. In addition, compliance with federal, State, and local regulations, General Plan Policies, and the County Department of

Public Works would ensure that there would be no hazardous design features. Therefore, potential impacts would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** The 2020 GHGRP Update GHG reduction measures do not include facilities that would substantially increase traffic hazards or the construction of incompatible uses related to traffic. Furthermore, any future development projects that would implement 2020 GHGRP Update GHG reduction measures would be subject to all applicable State and local regulations and requirements. Compliance with the State and local regulations would ensure no hazards would occur to transportation design features. Therefore, impacts would be the same as those identified for the Approved Project, which **is less than significant**. No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

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| e) | Result in inadequate emergency vehicle access? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.16.e) Approved Project Analysis.** Implementation of the Approved Project, per the GHGRP SEIR, would include GHG reduction measures such as roadway improvements including signal synchronization, traffic efficiency, and traffic flow management. The GHGRP would not result in new development or construction of facilities that would affect emergency access. In addition, all GHG reduction measures related to roadway improvements would be subject to County roadway design standards. Roadway designs must be consistent with the *Caltrans Highway Design Manual*. Furthermore, compliance with federal, State, Southern California Association of Governments (SCAG), and San Bernardino County Transportation Authority (SANBAG) regulations, along with General Plan Policies S9.1 and 2 and Programs 1 and 3, and Mitigation Measure TR-18 would ensure impacts related to emergency access would not be altered. Therefore, potential impacts to emergency access or evacuation plans would be **less than significant with mitigation incorporated**.

The Approved Project was determined to result in potential significant impacts pertaining to alterations of emergency vehicle access. As a result of these potentially significant impacts in the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measure:

**MM TR-18** The County shall ensure that future developments have no less than two points of access for emergency evacuation and for emergency vehicles, in the event of wildland fires and other natural disasters.

**2020 GHGRP Update Analysis.** The proposed changes in the 2020 GHGRP Update include new and enhanced GHG reduction measures. Although it is possible that future projects or actions could require temporary road closures during construction, which could adversely affect evacuation during an emergency response, any closures would be short term and alternate routes would be provided. It is unlikely that these actions would significantly interfere with emergency response or evacuation plans. Furthermore, GHG reduction measures related to roadway improvements would be subject to County roadway design standards. Compliance with federal, State, SCAG, and SBCTA regulations, along with updated Emergency Access Policy TM-1.8 from the Countywide Plan and Mitigation Measure TR-18 would ensure impacts related to emergency access would not be significant. Therefore, potential impacts would be the same as those identified for the Approved Project, which is **less than significant with mitigation incorporated**.

### Mitigation Measures

The analysis provided in the certified General Plan EIR of the Approved Project determined that Mitigation Measure TR-18 was implemented to reduce impacts related to inadequate emergency access. This measure would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

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| f) | Result in inadequate parking capacity? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.16.e) Approved Project Analysis.** Implementation of the Approved Project, per the GHGRP SEIR, would include GHG reduction measures such as vanpool programs, roadway improvements, VMT reduction, and ride sharing. The GHGRP would not result in new development or construction that would affect parking capacity. Furthermore, compliance with federal, State, SCAG, and SBCTA regulations, along with General Plan Policies, would ensure impacts related to parking capacity would not be significant. Therefore, potential impacts would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** Consistent with the Approved Project, implementation of the GHGRP Update would not interfere with parking capacity within the County. Any potential projects would need to comply with federal, State, and local regulations, along with updated policies from Countywide Plan to ensure potential impacts regarding parking capacity would be minimized or avoided. Therefore, impacts would be **less than significant**. No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

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| g) | Conflict with adopted policies, plans or programs regarding supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☐ | Reduced Impact ☒ |

**4.16.f) Approved Project Analysis.** Implementation of the GHGRP reduction measures consist of traffic flow management, roadway improvements, signal synchronization and bicycle and pedestrian infrastructure. The GHGRP would not result in new development or construction of facilities that would propose any land changes that would conflict with transit, bicycle, or pedestrian facilities. The GHGRP reduces transportation-related GHG emissions by furthering the policies, plans, and programs for public transit, bicycle, and pedestrian facilities. Compliance with General Plan Polices and Programs would ensure conflicts with adopted policies, plans, or programs would be minimized or avoided. General Plan CI 3.1 Program 1 institutes incentive programs for the use of alternative transportation modes and CI 3.1 Program 2 requires the provision of a pattern of land use designations that provides connectivity through pedestrian and bicycle paths. In addition, General Plan Policy CI 3.2 states that the County shall assist Omnitrans, Metrolink, and other transit agencies in coordinating the location and scheduling of public transit routes, services, and facilities for better coordination with bus and rail transit systems and General Plan Policy CI 3.3 mandates the extension of public transit between residential areas and industrial/urban employment centers. Lastly, Policy CI 6.1 requires safe and efficient pedestrian and bicycle facilities in residential, commercial, industrial, and institutional developments as well as the installation of bicycle lanes. With these General Plan Policies and Programs in order, potential impacts would be minimized or avoided. Therefore, impacts regarding policies, plans or programs would be **less than significant.** No mitigation was required.

**2020 GHGRP Update Analysis.** As with the Approved Project, the 2020 GHGRP Update would further encourage alternative methods of transportation, such as signal synchronization, public transit, and bicycle and pedestrian infrastructure, which would be consistent with the Countywide Plan – Policy Plan Policies and San Bernardino County Non-Motorized Transportation Plan. Therefore, implementation of the 2020 GHGRP Update would not conflict with any adopted policies, plans, or programs, or decrease the performance or safety of any public transit, bikeways, or pedestrian facilities. Therefore, impacts would be **less than significant**. No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

## Conclusion and Findings for Transportation/Traffic

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated since the SEIR of the Approved Project was certified in 2011.

- Would the 2020 GHGRP Update conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?
- Would the 2020 GHGRP Update cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections). Exceed, either individually or cumulatively, a level of service standard established by the County congestion management agency for designated roads or highways?
- Would the 2020 GHGRP Update result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?
- Would the 2020 GHGRP Update substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- Would the 2020 GHGRP result in inadequate emergency access?
- Would the 2020 GHGRP Update result in inadequate parking capacity?
- Would the 2020 GHGRP Update conflict with adopted policies, plans or programs regarding supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Transportation/Traffic impacts pertaining to the 2020 GHGRP Update would be equal to or less than those of the Approved Project that was concluded in the certified 2011 SEIR. The conclusions verifying that an Addendum to the certified 2011 SEIR is the proper CEQA documentation for the 2020 GHGRP Update are presented below.

### No Substantial Project Revisions Requiring Major EIR Revisions

The 2020 GHGRP Update would have no impacts on transportation/traffic, which is the same as the Approved Project. Consequently, there are no substantial project revisions that would require substantial changes to the analysis or findings of the revisions to the certified 2011 SEIR of the Approved Project.

### No Substantial Change in the Physical Environment or Regulations Requiring Major EIR Revisions

There have been no substantial changes in the physical environment or in the regulations associated with transportation/traffic; thus, no substantial changes in the physical environment or regulations require major revision to the certified 2011 SEIR.

**No New Information Showing New or Substantially More Severe Significant Effects than in the Certified EIR**

There is no new information showing new or substantially more severe significant effects on transportation/traffic than in the certified 2011 SEIR. As such, no revisions to the certified 2011 SEIR are required.

**No Substantial Changes in the Mitigation Measures or Alternatives**

There are no substantial changes to the mitigation measures or alternatives approved in the certified 2011 SEIR relative to transportation/traffic.

## 4.17 UTILITIES/SERVICE SYSTEMS

Would the project:

| | | | | | |
|---|---|---|---|---|---|
| a) | Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.17.a) Approved Project Analysis.** The 2007 General Plan Program EIR findings determined that the implementation of General Plan would result in less than significant impact regarding wastewater treatment requirements and the potential impacts would be mitigated to a level below significance through the adoption of Mitigation Measures UT-7 through 11 and 13. The GHGRP Draft and Final SEIR determined that subsequent development under the GHGRP could incrementally increase wastewater flows and require additional infrastructure and requirements to accommodate anticipated demands. Further, the implementation of General Plan Policy provisions and the continued enforcement of the County Development Code, including mitigation measures, would generally ensure that implementation of the Approved Project would not result in an increased severity of these impacts. Therefore, it was determined that the Approved Project would not result in any new impact that was not addressed in the General Plan EIR. Therefore, impacts would remain **less than significant with mitigation incorporated**. No new mitigation was required.

The Approved Project was determined to result in potential significant impacts pertaining to alterations of Utilities. As a result of these potentially significant impacts in the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM UT-7** The County shall coordinate and cooperate with governmental agencies at all levels to ensure safe, reliable, and high quality water supply for all residents and ensure prevention of surface and groundwater pollution.

**MM UT-8** The County shall apply federal and State water quality standards and wastewater discharge requirements in the review of development proposals that relate to type, location and size of the proposed project, for surface and groundwater to safeguard public health.

**MM UT-9** The County shall assist in the development of additional conveyance facilities and use of groundwater basins to store surplus of imported water.

**MM UT-10** County approval of new development will be contingent on the availability of adequate and reliable water supplies and conveyance systems, consistent with coordination between land use planning and water system planning.

**MM UT-11** The County shall monitor future development to ensure that sufficient local water supply or alternative imported water supplies can be provided.

**MM UT-13** The County shall support the local wastewater/sewering authorities in implementing wastewater collection and treatment facilities when and where required by the appropriate RWQCB and County Department of Environmental Health and Safety.

**2020 GHGRP Update Analysis.** Future development accommodated through the 2020 GHGRP Update would include water conservation measures that will result in reduction in the amount of wastewater generated and processed through the Inland Empire Utilities Agency (IEUA) (various locations), Rialto, Colton, San Bernardino, Redlands, Yucaipa Valley Water District facilities and Lytle Creek, along with Victor Valley Regional Wastewater Agency. Compliance with the Santa Ana Regional Water Quality Control Board (RWQCB), the California Department of Public Health (CDPH), and CCR Title 22 would ensure that wastewater treatment requirements would not be exceeded. Similar to the Approved Project, the implementation of GHGRP Update would not result in any new impacts beyond what was determined in the General Plan EIR and GHGRP SEIR. Therefore, impacts would be **less than significant with mitigation incorporated**. No new mitigation is required.

### Mitigation Measures

The analysis provided in the certified GP EIR of the Approved Project determined that Mitigation Measures UT-7 through 11 and 13 were implemented to reduce impacts related to water and wastewater systems. These measures would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

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| b) | Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environment effects? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.17.b) Approved Project Analysis.** The GHGRP Draft and Final SEIR concluded that subsequent development under the GHGRP could incrementally increase wastewater flows and require additional infrastructure and requirements to accommodate anticipated demands. However, implementation of General Plan Policy provisions and the continued enforcement of the County Development Code would generally ensure that implementation of the Approved Project would not result in an increased severity of these impacts. Therefore it was determined that the Approved Project would not result in any new impact that was not addressed in the General Plan EIR. Therefore, impacts to affect new water or wastewater treatment facilities would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** As with the Approved Project, implementation of the 2020 GHGRP Update would not result in any new impact and would not require additional treatment facilities. Implementation of the continued enforcement of the County Development Code would generally ensure that implementation of the 2020 GHGRP Update would not result in an increased severity of these impacts. Therefore, impacts regarding new water or wastewater treatment facilities from the implementation of 2020 GHGRP Update would be **less than significant.** No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

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| c) | Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.17.c) Approved Project Analysis.** According to the GHGRP SEIR, implementation of the GHGRP GHG reduction measures could increase storm water flows and require additional infrastructure to accommodate anticipated demands. However, continued implementation of General Plan Policies CI 13.1 and CI 13.2 would ensure that no adverse impacts resulting from storm water drainage issues would occur. Therefore, no new or substantially more severe significant impacts were identified beyond what was evaluated in the General Plan EIR. Therefore, impacts related to storm water drainage would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** As with the Approved Project, implementation of the 2020 GHGRP Update GHG reduction measures could increase storm water flows and require additional infrastructure to accommodate anticipated demands. However, continued implementation of federal, State, and local regulations and updated Stormwater policies NR-2.5 and IU-3.1 from the Countywide Plan – Policy Plan (which are equally effective as the policies cited in the Approved Analysis) would ensure that no adverse impacts resulting from

storm water drainage issues would occur. Development would occur to existing areas with impervious surfaces but would not change any drainage patterns within the County. Any potential adverse effects on storm water drainage facilities would be reduced or avoided through compliance with regulations, including General Plan Policies. Therefore, any potential impacts regarding storm water drainage facilities would be **less than significant.** No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

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| d) | Have sufficient water supplies available to serve the project from existing entitlements and resources, or need new or expanded entitlements? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.17.d) Approved Project Analysis.** The General Plan EIR determined that implementation of the General Plan would result in a less than significant impact to water supply (General Plan EIR Impacts UT-1, 2, and 3). Implementation of the proposed General Plan Amendment, Greenhouse Gas Reduction Plan, and associated Development Code Amendment would incrementally increase demand for water supply as well as the potential for needed additional water supply infrastructure, both of which could result in significant effects on the physical environment. Implementation of General Plan Policy provisions and the continued enforcement of the County Development Code would generally ensure that implementation of the Approved Project would not result in an increased severity of these impacts. It was concluded that the Approved Project would not result in a new impact that was not addressed in the General Plan EIR. Therefore, impacts would be **less than significant.** No mitigation was required.

**2020 GHGRP Update Analysis.** As with the Approved Project, the implementation of the 2020 GHGRP Update would not result in any new impacts beyond what was analyzed in the General Plan EIR and GHGRP SEIR. Therefore, the proposed 2020 GHGRP Update would be the same as the Approved Project regarding sufficient water supplies. Potential impacts would be **less than significant** and no mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project. This is also true for the 2020 GHGRP Update; no mitigation is required.

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| e) | In a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.17.e) Approved Project Analysis.** The GHGRP Draft and Final SEIR concluded that subsequent development under the GHGRP could incrementally increase wastewater flows and require additional infrastructure and requirements to accommodate anticipated demands. However, implementation of General Plan Policy provisions and the continued enforcement of the County Development Code would generally ensure that implementation of the Approved Project would ensure adequate treatment capacity of wastewater facilities serving the County. Therefore, it was determined that the Approved Project would not result in any new impact that was not addressed in the General Plan EIR and impacts would be **less than significant**. No mitigation was required.

**2020 GHGRP Update Analysis.** As with the Approved Project, future development in accordance with the 2020 GHGRP Update would not result in any new impacts beyond what was analyzed in the General Plan EIR and GHGRP SEIR. Therefore, potential impacts regarding capacity of wastewater treatment facilities would be **less than significant**. No mitigation is required.

**Mitigation Measures**

There were no mitigation measures identified for the Approved Project beyond what was identified in the General Plan EIR. This is also true for the 2020 GHGRP Update; no mitigation is required.

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| f) | Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | New Significant Impact/ Increased Severity of Impact ☐ | New Mitigation is Required ☐ | No New Impact/ No Impact ☒ | Reduced Impact ☐ |

**4.17.f) Approved Project Analysis.** The General Plan EIR determined that the development will increase the amount of waste requiring disposal at landfills and that solid waste management is essential for the County. The General Plan EIR also identified mitigation measures to address the impacts. GHGRP SEIR determined future development associated with the GHGRP GHG reduction measures would include solid waste diversion. Waste going to landfills would be reduced with implementation of GHG reduction measures. Further, compliance with federal, State, and local measures, including Mitigation Measures UT-17, 18,

and 24, would reduce potential impacts. Therefore, impacts would be **less than significant with mitigation incorporated**.

The Approved Project was determined to result in potential significant impacts pertaining to alterations of solid waste disposal. As a result of these potentially significant impacts in the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of the following mitigation measures:

**MM UT-17** The County shall ensure a safe, efficient, economical and integrated solid waste management system that considers all waste generated within the County, including, agriculture, residential, commercial, and industrial wastes, while recognizing the relationship between disposal issues and the conservation of natural resources.

**MM UT-18** The County shall utilize a variety of feasible processes, including source reduction, transfer, recycling, landfilling, composting, and resource recovery to achieve an integrated and balanced approach to solid waste management.

**MM UT-24** The County shall carefully plan and oversee the siting of solid waste disposal facilities to ensure equitable distribution of these facilities throughout the County, and protect the viability of waste disposal sites from encroaching on incompatible land uses.

**2020 GHGRP Update Analysis.** As with the Approved Project, future development with implementation of the 2020 GHGRP Update would reduce the amount of solid waste going to local landfills. Following compliance of regulations, updated policies from Countywide Plan – Policy Plan, and mitigation measures would ensure potential impacts would be less than significant. Therefore, potential impacts would be **less than significant with mitigation incorporated**.

**Mitigation Measures**

The analysis provided in the certified GP EIR of the Approved Project determined that Mitigation Measures UT-17, 18, and 24 were implemented to reduce solid waste. These measures would also be implemented by the 2020 GHGRP Update. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

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|---|---|---|---|---|---|
| g) | Comply with federal, State, or local statues and regulations related to solid waste? | New Significant Impact/ Increased Severity of Impact | New Mitigation is Required | No New Impact/ No Impact | Reduced Impact |
| | | ☐ | ☐ | ☒ | ☐ |

**4.17.g) Approved Project Analysis.** As noted above in Response to Checklist Question 4.18.f, the GHGRP SEIR determined future development associated with the GHGRP would

include solid waste diversion. Solid waste would be reduced and solid waste diversion would comply with federal, State, and regulations, including General Plan Policies, County Diversion Programs—75 Percent Goal, including Mitigation Measures UT-17 through 24, regarding recycling of solid waste. Compliance with standards and regulations would avoid any potential impacts related to solid waste. Therefore, potential impacts would be **less than significant with mitigation incorporated**.

The Approved Project was determined to result in potential significant impacts pertaining to alterations of solid waste. As a result of these potentially significant impacts in the area, the General Plan EIR and GHGRP SEIR for the Approved Project required implementation of Mitigation Measures UT-17, UT-18, and UT-24 (see Response to Checklist Question 4.17.f) and the following mitigation measures:

**MM UT-19** The County shall seek federal and State funds for projects utilizing resource and material recovery processes.

**MM UT-20** The County shall continue recycling operations at County landfills and expand recycling operations to other landfills or resource recovery facilities.

**MM UT-21** Where feasible, the County shall explore the feasibility and environmental impacts of reopening inactive landfills where there is useful capability remaining.

**MM UT-22** The County shall assist the private sector wherever possible in developing methods for the reuse of inert materials (concrete, asphalt and other building wastes) that currently use valuable landfill space.

**MM UT-23** The County shall continue to map the precise location of all waste sites (existing, inactive, and closed) on the County's automated mapping system and create a database with information on air, soil and water contamination and the type of wastes disposed of at each site.

**2020 GHGRP Update Analysis.** Development in accordance with the 2020 GHGRP Update would comply with federal, State, and local regulations, including mitigation measures, regarding recycling of solid waste. Implementation of the GHGRP Update would not produce any impacts. Compliance with regulations and policies would minimize potential impacts. Therefore, potential impacts would be **less than significant.**

### Mitigation Measures

The analysis provided in the certified General Plan EIR of the Approved Project determined that Mitigation Measures UT-17 through 24 were implemented to reduce solid waste. Implementation of the 2020 GHGRP Update would not result in the requirement of any new mitigation measures.

### Conclusion and Findings for Utilities/Service Systems

The *CEQA Statute and Guidelines* Appendix G Environmental Checklist Form have been updated since the SEIR of the Approved Project was certified in 2011.

- Would the 2020 GHGRP Update require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- Does the 2020 GHGRP Update have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
- Would the 2020 GHGRP Update result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- Would the 2020 GHGRP Update generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- Would the 2020 GHGRP Update comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Utilities/service systems impacts pertaining to the 2020 GHGRP Update would be equal to or less than those of the Approved Project that was concluded in the 2011 GHGRP SEIR. The conclusions verifying that an Addendum to the GHGRP SEIR is the proper CEQA documentation for the 2020 GHGRP Update are presented below.

**No Substantial Project Revisions Requiring Major SEIR Revisions**

The 2020 GHGRP Update would have no impacts on utilities/service systems, beyond what was discussed for the Approved Project. Consequently, there are no substantial project revisions that would require substantial changes to the analysis or findings of the revisions to the 2011 GHGRP SEIR of the Approved Project.

**No Substantial Change in the Physical Environment or Regulations Requiring Major SEIR Revisions**

There have been no substantial changes in the physical environment or in the regulations associated with utilities/service systems; thus, no substantial changes in the physical environment or regulations require major revision to the 2011 GHGRP SEIR.

**No New Information Showing New or Substantially More Severe Significant Effects than in the GHGRP SEIR**

There is no new information showing new or substantially more severe significant effects on utilities/service systems than in the 2011 GHGRP SEIR. As such, no revisions to the GHGRP SEIR are required.

**No Substantial Changes in the Mitigation Measures or Alternatives**

The General Plan EIR identified following mitigation measures for impacts on utilities/service systems resulting from the future growth of the county. there are no substantial changes to

the mitigation measures approved in the General Plan EIR and subsequent GHGRP SEIR relative to utilities/service systems.

# SECTION 5.0 LIST OF PREPARERS

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# SECTION 6.0 REFERENCES

_____ County of San Bernardino Draft Greenhouse Gas Reduction Plan Update, 2021.

_____ County of San Bernardino General Plan Amendment and Countywide Greenhouse Gas Emissions Reduction Plan Initial Environmental Study, 2010

_____ County of San Bernardino Greenhouse Gas Emissions Reduction Plan, 2011.

_____ County of San Bernardino Greenhouse Gas Reduction Draft Supplemental Environmental Impact Report, 2011.

_____ County of San Bernardino Greenhouse Gas Reduction Final Supplemental Environmental Impact Report, 2011.

_____ San Bernardino County General Plan Final Environmental Impact Report, 2007.

_____ San Bernardino County Countywide Plan – County Policy Plan, 2020

# EXHIBIT C

San Bernardino Greenhouse Gas Reduction Plan Supplemental Environmental Impact Report:

http://www.sbcounty.gov/Uploads/lus/Countywide/GreenhouseGas/Full-Vol-1.pdf

http://www.sbcounty.gov/Uploads/lus/Countywide/GreenhouseGas/Full-Vol-2.pdf