1 INTRODUCTION AND SUMMARY

1.1 INTRODUCTION TO THE FINAL ADDITIONAL ENVIRONMENTAL ANALYSIS

This document, called the Final Additional Environmental Analysis (Final AEA), provides copies of public comments submitted on the Draft Additional Environmental Analysis (Draft AEA) for the Newhall Ranch Resource Management and Development Plan (RMDP) and Spineflower Conservation Plan (SCP) and responses to significant environmental points raised in those comments. It also includes environmental analysis and descriptions of feasible mitigation measures in Chapter 2 that are updated and revised to reflect responses to public comments and other clarifying information developed since the Draft AEA was completed. The Draft AEA was made available for public, agency, and Native American tribal government comments between November 3, 2016 and February 13, 2017.

1.1.1 Purpose of the Draft and Final Additional Environmental Analysis

The full Additional Environmental Analysis (AEA) consists of the Draft AEA, Final AEA, and applicable material in the whole of the record, including public comments and responses to comments, revised environmental analysis and mitigation measures, and supporting appendices contained herein. The AEA has been prepared by the California Department of Fish and Wildlife (CDFW) (formerly California Department of Fish and Game) for the Newhall Ranch RMDP and SCP (i.e., the "project").

The AEA has been prepared in response to direction from the California Supreme Court in its decision regarding the project's environmental impacts (*Center for Biological Diversity v. California Department of Fish and Wildlife* (2015) 62 Cal.4th 204). CDFW certified the original environmental impact report (EIR) for the RMDP and SCP (hereafter the 2010 Final EIR), and approved the project in December 2010 (SCH No. 2000011025). The Supreme Court decision addressed two topics relevant to CDFW's environmental analysis, concluding: (1) CDFW's less-than-significant impact conclusion for greenhouse gas (GHG) emissions was not supported by substantial evidence and (2) that biological mitigation measures BIO-44 and BIO-46 as approved by CDFW violated Fish and Game Code section 5515. The two mitigation measures described how the U.S. Fish and Wildlife Service (USFWS) or its authorized agent could collect and relocate, if necessary, the unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*) during installation of bridges and bank stabilization in or near the Santa Clara River. Unarmored threespine stickleback is a freshwater fish designated as endangered by federal and state law, and as fully protected under Fish and Game Code section 5515.

The project applicant, The Newhall Land and Farming Company, responded to the Supreme Court decision with proposed modifications to the project's GHG reduction measures, and to the design and construction methods for the proposed development of Santa Clara River bridge crossings and bank stabilization. (Land developments and associated infrastructure improvements proposed by the project applicant would implement the project's natural resources management and conservation planning obligations.) Related to GHG, the project applicant has proposed a commitment to achieve zero net GHG emissions with the implementation of mitigation measures that would reduce, mitigate, and offset 100 percent of the project's GHG emissions. The project applicant has also proposed to modify the design and construction methods for the project's bridges and bank stabilization to avoid any contact with the wetted channel of the Santa Clara River under construction season conditions (i.e., estimated dry-season, high-flow conditions). The proposed modifications would eliminate the need for construction-period water diversions, and the collection and relocation of unarmored threespine stickleback.

The AEA contains environmental analysis of the modified project and includes consideration of the project applicant's proposed revisions to the GHG reduction measures and to the method by which the bridges and

bank stabilization would be constructed. Public comments have been received on the two technical evaluation sections in the Draft AEA, as well as on other environmental subjects.

This Final AEA presents a list of commenters, the full text of written comments with specific, individual comments bracketed and numbered for cross reference to responses. Responses to significant environmental points raised in comments on the Draft AEA are provided in Chapter 3. Changes to the Draft AEA presentation are presented in Chapter 2. The revisions are warranted either by responses to comments or from clarifying information developed since the Draft AEA. Chapter 2 contains the complete and fully updated technical analyses, originally provided in the Draft AEA, for both GHG emissions (Section 2.1) and unarmored threespine stickleback (Section 2.2).

1.1.2 EIR Background and Prior Environmental Impact Conclusions Related to GHG and Unarmored Threespine Stickleback

In 2004, CDFW and the U.S. Army Corps of Engineers (USACE) began preparation of a joint Environmental Impact Statement/EIR (EIS/EIR) for the two natural resource plans that compose the project (i.e., the Resource Management and Development Plan and the Spineflower Conservation Plan) and related federal and state permits. The project would be implemented in conjunction with development of Newhall Ranch, a large-scale residential and commercial development, and two other planned developments on the project applicant's land holdings located in the unincorporated portion of the Santa Clarita Valley in northwestern Los Angeles County.

In its GHG analysis, the 2010 Final EIR concluded that the project would not result in significant GHG emissions impacts under CEQA, after considering identified mitigation measures and other regulatory requirements. The 2010 Final EIR's GHG analysis used the project's consistency with the statewide GHG emission reduction target, as set forth in the 2006 Global Warming Solutions Act (Assembly Bill 32 [AB 32]), to determine the significance of GHG emission impacts. To demonstrate consistency, the 2010 Final EIR estimated the project's percent reduction beyond an unregulated condition (i.e., a comparison to business as usual or BAU) and whether it aligned with a statewide reduction percentage shown in the California Air Resources Board's (ARB) 2008 Climate Change Scoping Plan as the CEQA significance threshold. Based on this analysis, the 2010 Final EIR discussed and CDFW concluded that the project's GHG emissions would result in a less-than-significant impact on global climate change. In its analysis of potential impacts to the unarmored threespine stickleback, the 2010 Final EIR discussed and CDFW concluded that the project's construction-related stream diversion and dewatering activities in the Santa Clara River, which runs through the Newhall Ranch community, could result in a significant impact from potential "take" as defined by state law of the unarmored threespine stickleback. In response, the 2010 Final EIR included and CDFW approved two mitigation measures, BIO-44 and BIO-46, to avoid or reduce impacts to aquatic species, including unarmored threespine stickleback. The mitigation measures included collection and relocation of the unarmored threespine stickleback by USFWS personnel (or their agents) to avoid adverse effects and the prospect of take during construction of bridges and bank stabilization. With the mitigation measures, the 2010 Final EIR discussed and CDFW concluded that environmental impacts to the species would be less than significant.

In December 2010, CDFW certified the 2010 EIR portion of the EIS/EIR and approved the project. In approving the project, CDFW adopted CEQA-required findings for the project's significant environmental impacts, mitigation measures, and alternatives considered in the 2010 Final EIR. CDFW also adopted a statement of overriding considerations for certain unavoidable significant effects on the environment. In addition, CDFW adopted findings required by the California Endangered Species Act (CESA) for the two incidental take permits, issued the two incidental take permits, and executed the Master Lake and Streambed Alteration Agreement for the project. (See generally Fish & G. Code, sections 1602, 2081, subd. (b).)

1.1.3 CEQA Compliance Approach for the Additional Environmental Analysis

PREPARATION APPROACH FOR THE DRAFT AND FINAL ADDITIONAL ENVIRONMENTAL ANALYSIS

CDFW has prepared the AEA as the CEQA lead agency. CDFW staff and consultants under contract to CDFW prepared the Draft AEA and Final AEA, in consultation with CARB staff. CARB specialists with expertise in global climate change, GHG emissions modeling and analysis, and GHG emission reduction strategies consulted with CDFW to assist in the preparation and review of the GHG analysis in the AEA. The analysis of environmental impacts and mitigation measures related to the unarmored threespine stickleback has been subject to technical guidance, review, and approval by CDFW and environmental scientists and engineers with expertise in the life history, habitat requirements, and ecology of the species. Please refer to Chapter 4, List of Preparers, for the agency staff and consultants involved in preparing the AEA.

During the Draft AEA and Final AEA preparation, the project applicant submitted to CDFW descriptions of the modified aspects of the project, modeling of GHG emissions, proposed GHG and unarmored threespine stickleback mitigation measures, preliminary environmental impact analyses, information to support responses to comments about significant environmental topics, and other project information. As part of the environmental review process, CDFW has exercised its independent, lead agency review and analysis, pursuant to Public Resources Code section 21082.1, subdivision (c)(1), and has applied its independent judgment and discretion in both the conduct of analysis contained in the Draft AEA and in the preparation of responses to comments in this document.

PUBLIC CIRCULATION FOR COMMENTS ON THE DRAFT AEA

The Draft AEA was circulated for public review and comment initially for a 60-day period, plus additional days to account for the intervening holidays. The public review period began on November 3, 2016 with the publishing of the Notice of Availability (NOA). In December 2016, CDFW released another NOA announcing the extension of the circulation period into February 2017. The public review period concluded on February 13, 2017.

The Draft AEA was available for public and agency review online at CDFW's website: www.wildlife.ca.gov/regions/5/newhall. You may receive a CD containing the Draft AEA by emailing a request to: NewhallRanch@wildlife.ca.gov. Also, paper copies of the document were available for review at public libraries in the vicinity of the project and CDFW offices in Los Alamitos, San Diego, and Sacramento.

Written comments on the Draft AEA were received from public agencies, tribes, organizations, and individuals. The comments have been numbered and organized for presentation and responses in Chapter 3. Refer to the introduction section of Chapter 3 for an explanation of the comment organization and approach to responses.

1.2 FINAL ADDITIONAL ENVIRONMENTAL ANALYSIS ORGANIZATION

This Final AEA is organized into the following sections:

Chapter 1, Introduction and Summary. This section provides background information about the project and introduces the purpose of the AEA. The section also presents an updated summary of significant impacts and mitigation measures with refinements included since the public review of the Draft AEA.

Chapter 2, Revised Additional Environmental Analysis. Chapter 2 assembles in one location the changes to the Draft AEA that have been made as a result of comments on the Draft AEA and responses to those comments. Text revisions are shown in underline for additions and strike-out format to show deletions.

Chapter 3, Comments and Responses. Chapter 3 provides a full list of written comments received on the Draft AEA, verbatim comments, and responses to significant environmental issues raised in the comments. Responses include a set of topical responses that provide a comprehensive response to comments raised multiple times, as well as responses to individual comments.

Chapter 4, List of Preparers and Agencies Consulted. This chapter presents a list of the preparers of this AEA and the names of other agency personnel consulted during the AEA preparation.

Appendices. This Final AEA also presents in appendices the supporting information and data upon which the analysis directly relies. It includes appendices from the Draft AEA that were revised in some way and supplemental appendices provided for the Final AEA.

Other materials have been submitted by the project applicant as information sources for the AEA preparation. Following independent review and analysis by CDFW of the submitted information, pertinent data and information are cited and noted in a "References Cited" subsection of Chapters 2 and 3 of the Draft AEA. The remainder of the project applicant's submitted material is included in CDFW's administrative record of proceedings.

1.3 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This section presents an updated and current summary of significant project impacts and mitigation measures, after consideration of public comments and responses to those comments, as well as input offered by the applicant and incorporated into the Final AEA after independent review and analysis by CDFW.

The significance conclusions of the impact summaries in this section have not changed from those presented in the Draft AEA.

Clarifications to Impacts 3-1, 3-2, and 3-4 and Mitigation Measures 2-1, 2-2, 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, 2-9, 2-10, 2-11, 2-12, 2-13, 3-1, 3-2, and 3-3 have been made below, with deletions in strikethrough and additions noted by underlines, as compared to the Draft AEA text. In addition, a Supplemental GHG-Reducing Commitment by the applicant has been added at the end of the GHG summary.

1.3.1 Global Climate Change/Greenhouse Gas Emissions

Impact 2-1: Project-Generated GHG Emissions

The project is estimated to generate annualized construction emissions of 6,437 MT CO_2e amortized over 30 years (193,119 MT CO_2e total), net annualized vegetation change emissions of 1,335 MT CO_2e amortized over 30 years (40,059 MT CO_2e total based on net change in carbon sequestration/land use changes), and 518,330 MT CO_2e operations-related emissions at project buildout in 2030. Before consideration of mitigation measures proposed by the project applicant, total project emissions would be 526,103 MT CO_2e/year in 2030. This level of GHG emissions has the potential to result in a considerable contribution to cumulative emissions related to global climate change, and would be **potentially significant without the implementation of further mitigation**.

Mitigation Measure 2-1: Residential Zero Net Energy

Prior to the issuance of residential building permit~~s~~ for the project or a portion of the project, the project applicant or its designee shall submit one or more ~~a~~ Zero Net Energy Confirmation (ZNE) Report~~s~~ (ZNE Report) prepared by a qualified building energy efficiency and design consultant to Los Angeles County for review and ~~approval~~ confirmation that the residential development covered by the ZNE Report achieves the ZNE standard specified in this mitigation measure. Specifically, a ~~The~~ ZNE Report shall demonstrate that the residential development within the RMDP/SCP project site subject to application of Title 24, Part 6, of the California Code of Regulations has been designed and shall be constructed to achieve ZNE, as defined by CEC in its 2015 Integrated Energy Policy Report, which requires the value of the net energy produced by project renewable energy resources to equal the value of the energy consumed annually by the project using the CEC's Time Dependent Valuation metric ~~or otherwise achieve an equivalent level of energy efficiency, renewable energy generation or greenhouse gas emissions savings~~.

A ZNE Report shall provide, at a minimum, the following information ~~may, but is not required to~~:

- Confirmation that the residential development shall comply with Title 24, Part 6 building standards that are operative at the time of building permit application.
- Identification of additional measures or building performance standards that shall be relied upon to achieve the ZNE standard (as defined above), assuming ZNE is not already achieved by meeting the operative Title 24, Part 6 building standards.

  In demonstrating that the residential development achieves the ZNE standard, the ZNE Report may:

- Evaluate multiple buildings and/or land use types. For example, a ZNE Report may cover all of the residential and ~~commercial~~ non-residential buildings within a neighborhood/community, or a subset thereof, including an individual building.

- Rely upon aggregated or community-based strategies to support its determination that the subject buildings are designed to achieve ZNE. For example, shortfalls in renewable energy generation for one or more buildings may be offset with excess renewable generation from one or more other buildings~~, or off-site renewable energy generation~~. As such, a ZNE Report could determine a building is designed to achieve ZNE based on aggregated or community-based strategies even if the building on its own may not be designed to achieve ZNE.

- Make reasonable assumptions about the estimated electricity and natural gas loads and energy efficiencies of the subject buildings.

- If interconnection of the project's renewable generation is not sufficient to allow compliance with the ZNE standard for the project, or a portion of the project, then Los Angeles County shall allow the project applicant or its designee to achieve an equivalent level of GHG emissions reductions to mitigate such shortfall by providing 5.1 MT CO_2e of GHG reductions for every megawatt-hour of renewable energy generation that would have been needed to achieve the ZNE standard for the project, or a portion of the project, as demonstrated in the ZNE Report.

Discussion

Project-related emissions of GHGs from the residential energy sector (i.e., electricity and natural gas) would be substantially reduced through implementation of Mitigation Measure 2-1. Through the incorporation of zero-energy technology into new residential development, as prescribed by a qualified energy efficiency and design consultant, fossil fuel-related sources of GHGs associated with energy use would be reduced ~~not occur from project-related activities~~.

Mitigation Measure 2-1 is considered feasible and enforceable mitigation because the project applicant or its designee shall be required to comply with the standards and components of the measure before construction begins. Los Angeles County shall hold the project applicant or its designee accountable for meeting the criteria of Mitigation Measure 2-1 prior to approving or issuing residential building permits. Issuance of residential buildings permits shall be contingent upon the project applicant or its designee providing adequate evidence as to implementation of Mitigation Measure 2-1 as specified.

As shown below in Table 2.3-4, implementation of Mitigation Measure 2-1 would reduce operations-related GHG emissions by ~~30,659~~ 30,656 MT CO_2e/year from residential electricity and natural gas use. Details on this measure, including estimated reductions, supporting data and implementation mechanisms are provided in Technical Report Tables ES-3 and 4-1a through 4-1d and Technical Report Appendix C, all contained in Draft AEA Appendix 1.

Mitigation Measure 2-2: Non-Residential Zero Net Energy

Prior to the issuance of building permits for commercial development and private recreation centers, and prior to the commencement of construction for the public facilities, respectively, for the project or a portion of the project the project applicant or its designee shall submit one or more ~~a~~ Zero Net Energy Confirmation Reports (ZNE Report) prepared by a qualified building energy efficiency and design consultant to Los Angeles County for review and confirmation that the commercial development, private recreation centers, and/or public facilities covered by the ZNE Report achieve the ZNE standard specified in this mitigation measure ~~approval~~. Specifically, a ~~The~~ ZNE Report shall demonstrate that the commercial development, private recreation centers, and public facilities within the RMDP/SCP project site subject to application of Title 24, Part 6, of the California Code of Regulations have been designed and shall be constructed to achieve ZNE, as defined by CEC in its 2015 Integrated Energy Policy Report, which requires the value of the net energy produced by project renewable energy resources to equal the value of the energy consumed annually by the project using the CEC's

Time Dependent Valuation metric ~~or otherwise achieve an equivalent level of energy efficiency, renewable energy generation, or GHG gas emissions savings~~.

("Commercial development" includes retail, light industrial, office, hotel, and mixed-use buildings. "Public facilities" are fire stations, libraries, and elementary, middle/junior high and high schools.)

A ZNE Report shall provide, at a minimum, the following information ~~may, but is not required to~~:

- Confirmation that the commercial development, private recreation centers, and/or public facilities shall comply with Title 24, Part 6 building standards that are operative at the time of building permit application.

- Identification of additional measures or building performance standards that shall be relied upon to achieve the ZNE standard (as defined above), assuming ZNE is not already achieved by meeting the operative Title 24, Part 6 building standards.

In demonstrating that the commercial development, private recreation centers, and/or public facilities achieves the ZNE standard, the ZNE Report may:

- Evaluate multiple buildings and/or land use types. For example, a ZNE Report may cover all of the residential and non-residential buildings within a neighborhood/community, or a subset thereof, including an individual building.

- Rely upon aggregated or community-based strategies to support its determination that the subject buildings are designed to achieve ZNE. For example, short falls in renewable energy generation for one or more buildings may be offset with excess renewable generation from one or more other buildings~~, or off-site renewable energy generation~~. As such, a ZNE Report could determine a building is designed to achieve ZNE based on aggregated or community-based strategies even if the building on its own may not be designed to achieve ZNE.

- Make reasonable assumptions about the estimated electricity and natural gas loads and energy efficiencies of the subject buildings.

- If interconnection of the project's renewable generation is not sufficient to allow compliance with the ZNE standard for the project, or a portion of the project, then Los Angeles County shall allow the project applicant or its designee to achieve an equivalent level of GHG emissions reductions to mitigate such shortfall by providing 5.1 MT CO_2e of GHG reductions for every megawatt-hour of renewable energy generation that would have been needed to achieve the ZNE standard for the project, or a portion of the project, as demonstrated in the ZNE Report.

Discussion

Project-related emissions of GHGs from the non-residential energy sector (i.e., electricity and natural gas) would be substantially reduced through implementation of Mitigation Measure 2-2. Through incorporation of zero-energy technology into all non-residential development associated with the project, as prescribed by a qualified energy efficiency and design consultant, fossil fuel-related sources of GHGs associated with energy use would be reduced ~~not occur from project-related activities~~.

Mitigation Measure 2-2 is considered feasible and enforceable mitigation because the project applicant or its designee shall be required to comply with the standards and components of the measure before construction begins. Los Angeles County shall hold the project applicant or its designee accountable for meeting the criteria of Mitigation Measure 2-2 prior to approving or issuing non-residential building permits and prior to commencement of construction for public facilities. Issuance of non-residential building permits and/or commencement of construction shall be contingent upon the project applicant or its designee providing adequate evidence that Mitigation Measure 2-2 has been implemented as specified.

As shown below in Table 2.3-4, implementation of Mitigation Measure 2-2 would reduce operations-related GHG emissions by ~~24,512~~ 24,456 MT CO_2e/year from non-residential electricity and natural gas use. Details on this measure, including estimated reductions, supporting data and implementation mechanisms are provided in Technical Report Tables ES-3 and 4-2a through 4-2d and Technical Report Appendix C, all contained in Draft AEA Appendix 1.

Mitigation Measure 2-3: Swimming Pool Heating

Prior to the issuance of private recreation center building permits, the project applicant or its designee shall submit swimming pool heating design plans to Los Angeles County for review and approval. The design plans shall demonstrate that all swimming pools located at private recreation centers on the RMDP/SCP project site have been designed and shall be constructed to use solar water heating or other technology with an equivalent level of energy efficiency.

Discussion

Project-related emissions of GHGs from the energy sector (specifically natural gas) associated with heating swimming pools would be eliminated through incorporation of low-emission heating design for pools constructed as a result of project implementation. Swimming pools shall be designed and constructed to use solar water heating or other technology with an equivalent level of energy efficiency; therefore, no combustion of natural gas would occur during heating and operation of the swimming pools.

Mitigation Measure 2-3 is considered feasible and enforceable mitigation because the project applicant or its designee shall be required to comply with the standards and components of the measure before construction begins. Los Angeles County shall hold the project applicant or its designee accountable for meeting the criteria of Mitigation Measure 2-3 prior to approving or issuing private recreation center building permits. Issuance of private recreation center building permits will contingent upon the project applicant or its designee providing adequate evidence that Mitigation Measure 2-3 has been implemented as specified.

As shown below in Table 2.3-4, implementation of Mitigation Measure 2-3 would reduce operations-related GHG emissions by 22,356 MT CO_2e/year from natural gas use. Detailed calculations showing the estimated reduction are provided in Technical Report Tables ES-3 and 2-14a, contained in Draft AEA Appendix 1.

Mitigation Measure 2-4: Residential Electric Vehicle Chargers and Vehicle Subsidy

Prior to the issuance of residential building permits, the project applicant or its designee shall submit building design plans, to Los Angeles County for review and approval, which demonstrate that each residence within the RMDP/SCP project site subject to application of Title 24, Part 6, of the California Code of Regulations shall be equipped with a minimum of one single-port electric vehicle (EV) charging station. Each charging station shall achieve a similar or better functionality as a Level 2 charging station.

Additionally, prior to the issuance of the first building permit for the RMDP/SCP project site, the project applicant or its designee shall establish and fund a dedicated account for the provision of subsidies for the purchase of ZEVs, as defined by ARB. The project applicant or its designee shall provide proof of the account's establishment and funding to Los Angeles County.

The dedicated account shall be incrementally funded, for each village-level project, in an amount that equals the provision of a $1,000 subsidy per residence – on a first-come, first-served basis – for 65 ~~50~~ percent of the village's total residences subject to application of Title 24, Part 6, of the California Code of Regulations.

Discussion

Project-related emissions of GHGs from the transportation sector would be substantially reduced through incorporation of EV charging stations. Use of ZEVs results in a reduction of GHG emissions from fossil fuel-combusting engines. Further, the electricity supplied to EV charging stations may originate from renewable resources provided by public utilities, as specified through RPS, or on-site sources of renewable energy. As

discussed in Chapter 2, Global Climate Change/Greenhouse Gases, deployment of Senate Bill 350 would require public utilities to achieve a 50 percent renewable portfolio by 2030, the year of project buildout.

Mitigation Measure 2-4 is considered feasible and enforceable mitigation because the project applicant or its designee shall be required to comply with the standards and components of the measure before construction begins. Los Angeles County shall hold the project applicant or its designee accountable for meeting the criteria of Mitigation Measure 2-4 prior to approving or issuing residential building permits. Issuance of residential buildings permits shall be contingent upon the project applicant or its designee providing adequate evidence as to implementation of Mitigation Measure 2-4 as specified.

As shown ~~in~~ below in Table 2.3-4, implementation of Mitigation Measure 2-4 would reduce operations-related GHG emissions by ~~53,735~~ 53,724 MT CO_2e/year from the transportation sector. Detailed calculations showing the estimated reduction are provided in Technical Report Tables ES-3 and 4-3, contained in Draft AEA Appendix 1.

Mitigation Measure 2-5: Commercial Development Area Electric Vehicle Chargers

Prior to the issuance of commercial building permits, the project applicant or its designee shall submit building design plans, to Los Angeles County, which demonstrate that the parking areas for commercial buildings on the RMDP/SCP project site shall be equipped with EV charging stations that provide charging opportunities to 7.5 percent of the total number of required parking spaces. ("Commercial buildings" include retail, light industrial, office, hotel, and mixed-use buildings.)

The EV charging stations shall achieve a similar or better functionality as a Level 2 charging station. In the event that the installed charging stations use ~~more superior~~ functionality/technology other than Level 2 charging stations, the parameters of the mitigation obligation (i.e., number of parking spaces served by EV charging stations) shall reflect the comparative equivalency of Level 2 charging stations to the installed charging stations on the basis of average charge rate per hour. For purposes of this equivalency demonstration, Level 2 charging stations shall be assumed to provide charging capabilities of 25 range–miles per hour.

Discussion

Project-related emissions of GHGs from the transportation sector would be substantially reduced through incorporation of EV charging stations. Use of ZEVs results in a reduction of GHG emissions from fossil fuel-combusting engines. Further, the electricity supplied to EV charging stations may originate from renewable resources provided by public utilities, as specified through RPS, or on-site sources of renewable energy. As discussed above in Section 2.2, Regulatory Setting, deployment of SB 350 would require public utilities to achieve a 50 percent renewable portfolio by 2030, the year of project buildout.

Mitigation Measure 2-5 is considered feasible and enforceable mitigation because the project applicant or its designee shall be required to comply with the standards and components of the measure before construction begins. Los Angeles County shall hold the project applicant or its designee accountable for meeting the criteria of Mitigation Measure 2-5 prior to approving or issuing commercial building permits. Issuance of commercial buildings permits shall be contingent upon the project applicant or its designee providing adequate evidence as to implementation of Mitigation Measure 2-5 as specified.

As shown ~~in~~ below in Table 2.3-4, implementation of Mitigation Measure 2-5 would reduce operations-related GHG emissions by 39,109 MT CO_2e/year from the transportation sector. Detailed calculations showing the estimated reduction are provided in Technical Report Tables ES-3 and 4-4, contained in Draft AEA Appendix 1.

Mitigation Measure 2-6: Transportation Demand Management Plan

The project applicant-submitted Newhall Ranch Transportation Demand Management Plan (TDM Plan), located in ~~Technical Report~~ Final AEA Appendix 7 ~~contained in AEA Appendix 1~~, shall be implemented to reduce VMT

resulting from project build out with oversight from Los Angeles County. The TDM Plan is designed to influence the transportation choices of residents, students, employees, and visitors, and serves to enhance the use of alternative transportation modes both on and off the project site through the provision of incentives and subsidies, expanded transit opportunities, bikeshare and carshare programs, technology-based programs, and other innovative means. Village-level implementation ~~Implementation~~ of relevant elements of the TDM Plan ~~will be included as a condition of approval~~ shall proceed in accordance with village-level applicability supplements prepared by a qualified transportation engineer that are reviewed and considered by Los Angeles County when approving tentative subdivision maps for land developments that are part of the project.

Accordingly, the TDM Plan identifies key implementation actions that are critical to the effectiveness of the VMT-reducing strategies, as well as timeline and phasing requirements, monitoring standards, and performance metrics and targets tailored to each of the strategies.

In accordance with the TDM Plan, a non-profit Transportation Management Organization (TMO) or equivalent management entity shall be established to provide the services required, as applicable.

Discussion

Implementation of the TDM plan would reduce project-related emissions of GHGs from the transportation sector through incorporation of measures and strategies designed to influence behavior and increase the efficiency of transportation modes. Implementation of the TDM strategy will result in increased rates of alternative modes of transportation, such as walking, bicycling, and public transit use, with a subsequent decrease in single-occupancy vehicle dependency through vanpooling, car-sharing, and ride-matching programs, which will reduce transportation-related GHG emissions on a community-wide scale. Incorporation of measures to improve the efficiency of transportation systems will lower rates of emissions associated with idling and braking. Pursuant to SB 375, TDM strategies have been developed by Metropolitan Planning Organizations (MPOs) and incorporated into RTP/SCSs. These plans are reviewed by ARB, which has concluded that TDM produces a notable reduction in GHG emissions from automobiles.

As shown ~~in~~ below in Table 2.3-4, implementation of Mitigation Measure 2-6 would reduce operations-related GHG emissions by ~~60,179~~ 60,168 MT CO_2e/year from the transportation sector. Details on this measure, including estimated reductions, supporting data and implementation mechanisms, along with components of the project applicant-submitted TDM plan are provided in Technical Report Tables ES-3 and 4-5 and Technical Report Appendix E, all contained in Draft AEA Appendix 1.

Mitigation Measure 2-7: Traffic Signal Synchronization

Prior to the issuance of traffic signal permits, the project applicant or its designee shall work with Los Angeles County and the California Department of Transportation (Caltrans), as applicable, to facilitate traffic signal coordination along:

- State Route 126 from the Los Angeles County line to the Interstate 5 north-bound ramps;
- Chiquito Canyon Road, Long Canyon Road, and Valencia Boulevard within the RMDP/SCP project site;
- Magic Mountain Parkway from Long Canyon Road to the Interstate 5 north-bound ramps; and
- Commerce Center Drive from Franklin Parkway to Magic Mountain Parkway.

To effectuate the signal synchronization and specifically the operational and timing adjustments needed at affected traffic signals, the project applicant or its designee shall submit traffic signal plans for review and approval, and/or pay needed fees as determined by Los Angeles County or Caltrans, as applicable.

A majority of the signals that will be synchronized will be new signals constructed/installed by the project. Thus, for these signals, the project will provide the necessary equipment at the signal controller cabinet, as well as within the new roadways themselves, to enable and facilitate synchronization. The project is responsible for paying 100 percent of the applicable fee amount for the signal synchronization work, with assurance that the necessary funding will be available to fully implement this measure.

Discussion

The improved synchronization of the aforementioned intersections will improve vehicle efficiency, thus decreasing transportation-related emissions of GHGs associated with project implementation. Emissions from inefficient travel (e.g., idling) shall be mitigated through signal synchronization and improved vehicle movement.

Mitigation Measure 2-7 is considered feasible and enforceable mitigation because the project applicant or its designee shall be required to comply with the standards and components of the measure prior to issuance of traffic signal permits. Los Angeles County and Caltrans shall hold the project applicant or its designee accountable for meeting the criteria of Mitigation Measure 2-7 prior to issuing traffic signal permits. Issuance of traffic signal permits shall be contingent upon the project applicant or its designee providing adequate evidence as to implementation of Mitigation Measure 2-7 as specified.

As shown ~~in~~ below in Table 2.3-4, implementation of Mitigation Measure 2-7 would reduce operations-related GHG emissions by ~~8,214~~ 8,212 MT CO_2e/year from the transportation sector. Detailed calculations showing the estimated reduction are provided in Technical Report Tables ES-3 and 4-6 and Technical Report Appendix I, all contained in Draft AEA Appendix 1.

Mitigation Measure 2-8: Zero-Emission ~~Electric~~ School Bus Program

Consistent with the parameters of the Newhall Ranch TDM Plan, the project applicant or its designee shall provide Los Angeles County with proof that funding has been provided for the purchase, operation, and maintenance of ~~electric~~ zero-emission school buses in furtherance of the school bus program identified in the project's TDM Plan. The proof of funding shall be demonstrated incrementally as the school bus program is paced to village-level occupancy and student enrollment levels.

Discussion

Use of ~~electric~~ zero-emission school buses would mitigate transportation-related emissions of GHGs by reducing the use of GHG-emitting fossil fuels during operation of school buses. Proof of funding shall be demonstrated incrementally as the school bus program is paced to village-level occupancy and student enrollment levels.

As shown ~~in~~ below in Table 2.3-4, implementation of Mitigation Measure 2-8 would reduce operations-related GHG emissions by 157 MT CO_2e/year from the transportation sector. Detailed calculations showing the estimated reduction are provided in Technical Report Tables ES-3 and 4-7 in Draft AEA Appendix 1.

Mitigation Measure 2-9: Zero-Emission ~~Electric~~ Transit Bus Program

Prior to the issuance of the first 2,000th residential building permit within the RMDP/SCP project site and every 2,000th residential building permit thereafter, the project applicant or its designee shall provide Los Angeles County with proof that it has provided a subsidy of $100,000 per bus for the replacement of up to 10 diesel or compressed natural gas transit buses with ~~electric~~ zero-emission buses to the identified transit provider(s).

Discussion

Use of ~~electric~~ zero-emission transit buses would mitigate transportation-related emissions of GHGs by reducing the use of GHG-emitting fossil fuels (i.e., diesel fuel and natural gas) during operation of transit buses.

Mitigation Measure 2-9 is considered feasible and enforceable mitigation because the project applicant or its designee shall be required to comply with the standards and components of the measure before an incremental number of residential building permits are issued. Los Angeles County shall hold the project applicant or its designee accountable for meeting the criteria of Mitigation Measure 2-9 prior to issuing

building permits. Issuance of buildings permits shall be contingent upon the project applicant or its designee providing adequate evidence as to implementation of Mitigation Measure 2-9 as specified.

As shown ~~in~~ below in Table 2.3-4, implementation of Mitigation Measure 2-9 would reduce operations-related GHG emissions by 619 MT CO_2e/year from the transportation sector. Detailed calculations showing the estimated reduction are provided in Technical Report Tables ES-3 and 4-8 in Draft AEA Appendix 1.

Mitigation Measure 2-10: Offsetting Construction and Vegetation Change Emissions

Prior to issuing grading permits for village-level development within the RMDP/SCP project site, Los Angeles County shall confirm that the project applicant or its designee shall fully mitigate the ~~related~~ construction and vegetation change GHG emissions associated with each such grading permit (the "Incremental Construction GHG Emissions") by relying upon one of the following compliance options, or a combination thereof, in accordance with the project applicant-submitted Newhall Ranch GHG Reduction Plan (GHG Reduction Plan; see ~~Technical Report~~ Final AEA Appendix ~~6F contained in AEA Appendix 1~~):

- Directly undertake or fund activities that reduce or sequester GHG emissions ("Direct Reduction Activities") and retire the associated "GHG Mitigation ~~reduction~~ Credits ~~credits~~" in a quantity equal to the Incremental Construction GHG Emissions~~;~~. A "GHG Mitigation Credit" shall mean an instrument issued by an Approved Registry that satisfies the performance standards set forth in the GHG Reduction Plan and shall represent the estimated reduction or sequestration of one metric tonne of carbon dioxide equivalent that will be achieved by a Direct Reduction Activity that is not otherwise required (CEQA Guidelines section 15126.4(c)(3)). An "Approved Registry" is an accredited carbon registry as defined by the GHG Reduction Plan; or

- Obtain and retire "Carbon Offsets" ~~carbon credits that have been issued by a recognized and reputable carbon registry, as described in the GHG Reduction Plan,~~ in a quantity equal to the Incremental Construction GHG Emissions. "Carbon Offset" shall mean an instrument issued by an Approved Registry that satisfies the performance standards set forth in the GHG Reduction Plan and shall represent the past reduction or sequestration of one metric tonne of carbon dioxide equivalent achieved by a Direct Reduction Activity or any other GHG emission reduction project or activity that is not otherwise required (CEQA Guidelines Section 15126.4(c)(3)).

Discussion

Involvement in at least one of the actions listed above would be sufficient to offset the project's GHG emissions associated with construction- and vegetation change-related activities ~~to project implementation~~. The sum of ~~purchased~~ GHG Mitigation Credits ~~reduction credits~~ and/or Carbon Offsets ~~carbon credits~~ retired by the project applicant or its designee shall equal the total emissions generated during construction activities and vegetation removal associated with each such grading permit ~~as amortized over the life of the project (i.e., 30 years)~~. GHG Mitigation Credits and Carbon Offsets ~~credits~~ shall be of sufficient criteria to meet the standards of an Approved Registry ~~adequate carbon credit through a reputable carbon registry~~. Carbon Offsets ~~credits~~ purchased to offset construction and vegetation emissions shall be real, additional, quantifiable, enforceable, validated, and permanent. All GHG Mitigation Credits and Carbon Offsets must meet the performance standards identified in the GHG Reduction Plan. ~~The year of full buildout (2030), the project applicant shall engage in a one time purchase of carbon offsets that can demonstrate GHG reductions shall continue over the life of the project on a yearly basis.~~

Mitigation Measure 2-10 is considered feasible and enforceable mitigation because the project applicant or its designee shall be required to comply with the standards and components of the measure prior to issuance of grading permits. Los Angeles County shall hold the project applicant or its designee accountable for meeting the criteria of Mitigation Measure 2-10 prior to issuing grading permits. Issuance of grading permits shall be contingent upon the project applicant or its designee providing adequate evidence as to implementation of Mitigation Measure 2-10 as specified.

As shown ~~in~~ below in Table 2.3-4, implementation of Mitigation Measure 2-10 would reduce construction- and vegetation change-related GHG emissions by ~~7,808~~ 7,773 MT CO_2e/year. Details on this measure, including estimated reductions, supporting data and implementation mechanisms are provided in Technical Report Tables ES-2 and ES-3 and Technical Report Appendices F and K, all contained in Draft AEA Appendix 1.

Mitigation Measure 2-11: Building Retrofit Program

Prior to the issuance of building permits for ~~every 100 residential units or 100,000 square feet of commercial development for each village-level project~~ development within the RMDP/SCP project site, the project applicant or its designee shall ~~provide proof of funding of~~ undertake or fund Direct Reduction Activities pursuant to the Building Retrofit Program ("Retrofit Program"), as included in Final AEA Appendix 13, to improve the energy efficiency of existing buildings located primarily in disadvantaged communities (as defined in the Retrofit Program). The project applicant or its designee shall retire GHG Mitigation Credits or Carbon Offsets issued by an Approved Registry based on such Direct Reduction Activities in a quantity equal to the ~~proportional percentage~~ sum of the ~~Building Retrofit Program (Retrofit Program),~~ following (together, the "Retrofit Reduction Requirement") as included in ~~Technical Report~~ Final AEA Appendix 13 ~~G contained in Appendix 1, to Los Angeles County~~.

- For the residential portion of a building permit application, the product of the planned number of residential units for the village-level project multiplied by 0.0377 $MTCO_2e$;

- For the commercial portion of a building permit application, the product of the planned commercial development per thousand commercial square feet multiplied by 0.0215 $MTCO_2e$. ~~(~~"Commercial development" includes retail, light industrial, office, hotel and mixed-use buildings.~~)~~

Building retrofits covered by the Retrofit Program can include, but are not limited to: cool roofs, solar panels, solar water heaters, smart meters, energy efficient lighting (including, but not limited to, light bulb replacement), energy efficient appliances, energy efficient windows, pool covers, insulation, and water conservation measures.

The Retrofit Program shall be implemented within the geographic area defined to include Los Angeles County and primarily within disadvantaged communities, as defined by the Retrofit Program, or in other areas accepted by the Los Angeles County Planning Director.

~~Funding shall be applied to implement retrofits strategies identified in the Retrofit Program or other comparable strategies accepted by the Los Angeles County Planning Director.~~

Discussion

The Retrofit Program would reduce emissions through the replacement of existing and less-efficient technologies and addition of low-emission infrastructure. Cool roofs and improved insulation keep the internal temperatures of buildings low, thus reducing dependency on heating, ventilation and air conditioning systems and the indirect GHG emissions produced from their energy use. Solar panels and solar water heaters employ the sun's energy to heat and power buildings to meet energy demands while reducing GHG emissions from electricity and natural gas. Use of energy efficient lighting, meters, appliances, and windows lower the overall energy demand of a building or structure requiring less energy; therefore~~,~~ lowering the rate of energy-related fossil fuel combustion. Implementation of water conservation strategies further reduce GHG emissions associated with water and wastewater treatment and conveyance.

Mitigation Measure 2-11 is considered feasible and enforceable mitigation because the project applicant or its designee shall be required to comply with the standards and components of the measure prior to issuance of building permits for a proportional number of residential units or square feet of commercial space. Los Angeles County shall hold the project applicant or its designee accountable for meeting the criteria of Mitigation Measure 2-11 prior to issuing building permits. Issuance of buildings permits shall be contingent upon the

project applicant or its designee providing adequate evidence as to implementation of Mitigation Measure 2-11 as specified.

As shown ~~in~~ below in Table 2.3-4, implementation of Mitigation Measure 2-11 would reduce operations-related GHG emissions by 1,000 MT CO_2e/year from the energy sector. Detailed calculations showing the estimated reduction, along with supporting data, are shown in Technical Report Tables ES-3 and 4-9 and Technical Report Appendix G, all contained in Draft AEA Appendix 1.

Mitigation Measure 2-12: Off-Site Electric Vehicle Chargers

Prior to the issuance of the first building permit for the RMDP/SCP project site, the project applicant or its designee shall provide Los Angeles County with proof of installation of EV charging stations capable of serving 20 off-site parking spaces. Thereafter, the project applicant or its designee shall provide Los Angeles County proof of installation of EV charging stations prior to the issuance of residential and commercial building permits per the following ratios: one (1) off-site parking space shall be served by an ~~EV~~ electric vehicle charging station for every 30 dwelling units, and one (1) off-site parking space shall be served by an ~~EV~~ electric vehicle charging station for every 7,000 square feet of commercial development. ("Commercial development" includes retail, light industrial, office, hotel and mixed-use buildings.) Off-site EV charging stations capable of servicing 2,036 parking spaces would be required if the maximum allowable development facilitated by the RMDP/SCP project occurs; fewer EV charging stations would be required if maximum build-out under the RMDP/SCP project does not occur.

The EV charging stations shall achieve a similar or better functionality as a Level 2 charging station and may service one or more parking spaces. In the event that the installed charging stations use ~~more superior~~ functionality/technology other than Level 2 charging stations, the parameters of the mitigation obligation (i.e., number of parking spaces served by EV charging stations) shall reflect the comparative equivalency of Level 2 charging stations to the installed charging stations on the basis of average charge rate per hour. For purposes of this equivalency demonstration, Level 2 charging stations shall be assumed to provide charging capabilities of 25 range~~-~~miles per hour.

The EV charging stations shall be located within the geographic area defined to include Los Angeles County.~~,~~ ~~and~~ The EV charging stations shall be in areas that are generally accessible to the public.~~. For example, the charging stations may be located in~~ such as areas that include, but are not limited to, retail centers, employment centers and office complexes, recreational facilities, schools, and other categories of public facilities.

Discussion

The project would contribute to reductions from the transportation sector through incorporation of off-site EV charging stations. Use of ZEVs results in a reduction of GHG emissions from fossil fuel-combusting engines. Further, the electricity supplied to EV charging stations may originate from renewable resources provided by public utilities, as specified through RPS, or on-site sources of renewable energy. As discussed above in Section 2.2, Regulatory Setting, deployment of SB 350 would require public utilities to achieve a 50 percent renewable portfolio by 2030, the year of project buildout.

Mitigation Measure 2-12 is considered feasible and enforceable mitigation because the project applicant or its designee shall be required to comply with the standards and components of the measure prior to issuance of an incremental number of building permits for residential and commercial uses. Los Angeles County shall hold the project applicant or its designee accountable for meeting the criteria of Mitigation Measure 2-12 prior to issuing building permits. Issuance of buildings permits shall be contingent upon the project applicant or its designee providing adequate evidence as to implementation of Mitigation Measure 2-11 as specified.

As shown ~~in~~ below in Table 2.3-4, implementation of Mitigation Measure 2-12 would reduce operations-related GHG emissions by 39,813 MT CO_2e/year from the transportation sector. Detailed calculations showing the estimated reduction are provided in Technical Report Tables ES-3 and 4-4 in Draft AEA Appendix 1.

Mitigation Measure 2-13: Implement a GHG Reduction Plan

In addition to Mitigation Measures 2-1 through 2-12, the project applicant or its designee shall offset GHG emissions to zero by funding or undertaking Direct Reduction Activities ~~activities that directly reduce or sequester GHG emissions~~ or, if necessary, obtaining Carbon Offsets ~~carbon credits~~ through the Newhall Ranch GHG Reduction Plan. The project applicant-submitted Newhall Ranch GHG Reduction Plan focuses on achieving GHG reductions or sequestration through the Direct Reduction Activities ~~direct investment in specific programs or projects~~ in coordination with an Approved Registry ~~accredited carbon registry~~, such as the Climate Action Reserve. If these Direct Reduction Activities ~~direct investment efforts~~ do not achieve the necessary ~~an adequate~~ amount of GHG reductions, the project applicant or its designee can obtain Carbon Offsets issued by an Approved Registry ~~carbon credits from accredited carbon registries~~.

~~The South Coast Air Quality Management District recommends that mitigation be considered in the following prioritized manner: (1) project design feature/on site reduction measures; (2) off site within neighborhood; (3) off-site within district; (4) off-site within state; and (5) off-site out of state.~~ Prior to issuing building permits for development within the RMDP/SCP project site, Los Angeles County shall confirm that the project applicant or its designee shall fully offset the project's remaining (i.e., post implementation of Mitigation Measures 2-1 through 2-12) operational GHG emissions over the 30-year project life associated with each such building permit ~~permits~~ (the "Incremental Operational GHG Emissions") by relying upon one of the following compliance options, or a combination thereof, in accordance with the Newhall Ranch GHG Reduction Plan:

- Undertake or fund Direct Reduction Activities ~~Demonstrate that the project applicant has directly undertaken or funded activities that reduce or sequester GHG emissions ("Direct Reduction Activities")~~ that are estimated to result in GHG Mitigation Credits ~~reduction credits~~, as described in the GHG Reduction Plan, and retire such GHG Mitigation Credits ~~reduction credits~~ in a quantity equal to the Incremental Operational GHG Emissions ~~emissions~~;

- ~~Provide a guarantee that it shall retire carbon credits issued in connection with Direct Reduction Activities in a quantity equal to the Incremental Operational GHG emissions;~~

- Undertake or fund Direct Reduction Activities and retire the associated Carbon Offsets ~~carbon credits~~ in a quantity equal to the Incremental Operational GHG Emissions; or

- If necessary, as determined by the Los Angeles County Planning Director in accordance with the GHG Reduction Plan, ~~it is impracticable~~ to fully offset Incremental Operational GHG Emissions ~~through the Direct Reduction Activities~~, the project applicant or its designee may purchase and retire Carbon Offsets ~~carbon credits~~ that have been issued by an Approved Registry ~~a recognized and reputable, accredited carbon registry~~ in a quantity equal to the Incremental Operational GHG Emissions.

Compliance with MM 2-13 shall be demonstrated incrementally prior to obtaining building permits~~, and shall follow the preferred geographic hierarchy recommended by SCAQMD, discussed above~~.

The Incremental Operational GHG Emissions ~~emissions~~ shall be equal to the sum of (1) the number of proposed residential units covered by the applicable building permit multiplied by a "GHG Residential Ratio" ~~108.89 MT CO_2e~~ and (2) every thousand square feet of proposed commercial development covered by the applicable building permit multiplied by a "GHG Commercial Ratio." ("Commercial development" includes retail, light industrial, office, hotel, and mixed-use buildings.) GHG Residential Ratio and GHG Commercial Ratio shall mean the emissions ratios in $MTCO_2e$ set forth in the applicable CEQA analysis completed by the County of Los Angeles for a specific village-level project to ensure that the related GHG emissions are reduced to zero ~~506.86 MT CO_2e~~.

Discussion

See Technical Report Appendix K, contained in Draft AEA Appendix 1 for detailed information regarding the derivation of the GHG Residential Ratio and GHG Commercial Ratio for the project. For example, the GHG

Residential Ratio would be 108.89 $MTCO_2e$ per residential unit and the GHG Commercial Ratio would be 506.86 $MTCO_2e$ per thousand square feet of commercial development if the maximum allowable development facilitated by the RMDP/SCP project occurs. However, as noted above, the applicable GHG Residential Ratio and GHG Commercial Ratio for each village-specific project will be set forth in the applicable CEQA documentation for such village-level project ~~these estimates for the project~~.

Implementation of Mitigation Measure 2-13 shall be adequate to fully mitigate the Incremental Operational GHG Emissions through Direct Reduction Activities that result in GHG Mitigation Credits ~~direct investment in GHG reduction activities~~ and/or the efficacy of Carbon Offsets ~~carbon credits~~ and the reductions they produce. The parameters of the compliance options provided above ensure that the GHG Mitigation Credits and/or Carbon Offsets ~~carbon offsets~~ purchased by the project applicant or its designee meet the criteria of a successful and effective GHG reduction offset. To be accredited by an Approved Registry ~~a recognized carbon registry~~, Carbon Offsets ~~carbon offsets~~ must be ~~demonstrate that they are~~ real, additional, quantifiable, enforceable, validated, and permanent. Carbon Offsets ~~offsets~~ purchased to implement Mitigation Measure 2-13 ~~following project implementation~~ shall meet these standards, and the GHG Mitigation Credits and/or Carbon Offsets obtained by the project applicant or its designee shall produce levels of GHG reductions ~~carbon offsetting on a yearly basis~~ to mitigate the Incremental Operational ~~Operation~~ GHG Emissions during project implementation. All GHG Mitigation Credits and Carbon Offsets must meet the performance standards identified in the GHG Reduction Plan.

The Carbon Offsets ~~carbon offsets~~ associated with the aforementioned compliance options ~~responses~~ are considered appropriate and applicable mitigation for the Incremental Operational GHG Emissions produced by the project following deployment of Mitigation Measures 2-1 through 2-12. Accredited projects and programs participating in local, regional, and global carbon markets shall be subject to the standards enforced by Approved Registries ~~carbon registries~~. If it is found that a Carbon Offset project or program loses its ability to meet the criteria of being real, additional, quantifiable, enforceable, validated, and permanent, the Carbon Offset ~~it~~ loses its accreditation as an active carbon reducing or sequestrating action. The Carbon Offsets ~~carbon credits~~ purchased as a result of Mitigation Measure 2-13 shall be subject to the same standards. Therefore, in ~~In~~ the event that a Carbon Offset project or program providing Carbon Offsets ~~offsets~~ to the project applicant or its designee loses its accreditation, the project applicant or its designee shall comply with the rules and procedures of retiring Carbon Offsets ~~offsets~~ specific to the registry involved and will undertake additional direct investments or purchase an equivalent number of credits to recoup the loss.

Significance after Mitigation

Adoption and implementation of Mitigation Measure 2-1 through 2-13 would reduce mobile source-, electricity-, natural gas-, vegetation removal-, and construction-related emissions by 526,103 MT CO_2e/year (see Tables 2-4, 2-5, and 2-6). These measures reduce the projected unmitigated GHG emissions levels of the project (unmitigated emissions of 526,103 MT CO_2e/year above existing conditions) that would otherwise occur on the project site, leading to no net contributions of GHG emissions from the project, or zero net emissions. Because the project would result in no net increase of GHG emissions after implementation of mitigation measures, there would be no contribution of GHG emissions to cumulative GHG emissions influencing global climate change.

In addition, because the project would result in no net increase of GHG emissions, it would not conflict with any plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. The State, and by extension regional and local climate policy is rooted in achieving emissions level below the reference year of 1990 and is based on levels established by scientific evidence to avoid the most adverse impacts of climate change. Therefore, relevant plans, such as ARB's Scoping Plan, SCAG's RTP/SCS, and Los Angeles County's CCAP, all establish non-zero targets (i.e., some level of positive net emissions above existing conditions for land developments to accommodate planned growth) to achieve future GHG emissions targets. By achieving the project applicant's commitment to reach zero net emissions, the feasibility and reliability of which has been demonstrated in the analysis set forth in this AEA, the project would lead to no net increase in GHG

emissions and would not, therefore, result in any adverse change that could conflict with any relevant plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

In response to public comments, the following supplemental commitment is proposed by the project applicant:

Project Applicant-Proposed Supplemental Commitment

In addition to the installation of EV charging stations required by Mitigation Measures 2-5 and 2-12, and although not required for the project to achieve net zero GHG emissions, the project applicant or its designee shall provide Los Angeles County with proof of installation of EV charging stations prior to the issuance of residential and commercial building permits per the following ratios: one (1) parking space shall be served by an electric vehicle charging station for every 50 dwelling units, and one (1) parking space shall be served by an electric vehicle charging station for every 15,900 square feet of commercial development. ("Commercial development" includes retail, light industrial, office, hotel and mixed-use buildings.) EV charging stations capable of servicing 1,010 parking spaces would be required if the maximum allowable development facilitated by the RMDP/SCP project occurs; fewer EV charging stations would be required if maximum build-out under the RMDP/SCP project does not occur.

The EV charging stations shall achieve a similar or better functionality as a Level 2 charging station and may service one or more parking spaces. In the event that the installed charging stations use functionality/technology other than Level 2 charging stations, the parameters of the mitigation obligation (i.e., number of parking spaces served by EV charging stations) shall reflect the comparative equivalency of Level 2 charging stations to the installed charging stations on the basis of average charge rate per hour. For purposes of this equivalency demonstration, Level 2 charging stations shall be assumed to provide charging capabilities of 25 range-miles per hour.

The EV charging stations shall be located either on the project site or within the jurisdictional area of the Southern California Association of Governments. The EV charging stations shall be in areas that are generally accessible to the public, such as areas that include, but are not limited to, retail centers, employment centers and office complexes, recreational facilities, schools, and other categories of public facilities.

1.3.2 Unarmored Threespine Stickleback

Impact 3-1: Impacts from Bridge Construction, Maintenance, and Operation

As originally designed, construction of the permanent bridges at Commerce Center Drive and Long Canyon Road would have resulted in installation of bridge support piers within the Santa Clara River channel, which provides habitat for the unarmored threespine stickleback. After the bridge piers are installed outside of the wetted channel during the dry season, these locations could become inundated following storm events during the rainy season. Based on hydraulic modelling and analysis of expected fish behavior, scour depressions around and behind the bridge piers that could result after medium to heavy river flows would not result in stranding of unarmored threespine stickleback. This impact is less than significant and therefore no mitigation is prescribed.

Construction- and long-term maintenance activities within the wetted channel (as defined by the estimated high-flow condition during the dry-season when the activities would occur), increased pH in the water (which may affect water quality due to contact with uncured concrete), and falling construction debris from bridge decks into the water could lead to direct mortality or injury to unarmored threespine stickleback. These construction and long-term maintenance activities ~~This~~ would ~~be~~ have a **potentially significant impact without implementation of mitigation**. In response to the California Supreme Court decision, the project applicant has proposed to modify the bridge design, construction methods, and long-term maintenance activities as mitigation to avoid take of unarmored threespine stickleback. Impacts to unarmored threespine

stickleback from bridge construction, maintenance, and operation would be **less than significant with these mitigation measures.**

Mitigation 3-1: Bridge Construction, Maintenance, and Operation

The project applicant, or its designated general contractor, shall implement the following measures to avoid contact with the wetted channel, which would avoid affecting unarmored threespine stickleback.

3-1a: The project applicant, or its designated general contractor, shall implement the Project Design Features (PDFs) and regulatory measures as incorporated into the project's bridge and bank stabilization designs.

3-1b: The mandated Worker Environmental Awareness Program (Mitigation Measure BIO-52 from the 2010 Final EIR) shall include a discussion regarding restriction of access to the wetted channel of the Santa Clara River and repercussions if encroachment occurs.

3-1c: Prior to the commencement of construction activities, a qualified biologist shall survey the proposed work locations to confirm that the construction zone is outside the wetted channel of the river. Such surveys shall ensure that no work takes place where fish may be affected.

3-1d: During permanent bridge construction, a qualified biologist shall monitor all activities that are a threat to adjacent natural habitats or nearby species and ensure no equipment, personnel or debris enter or makes contact with the wetted channel of the river.

3-1e: A clear weather window, defined for this project as a ~~less than~~ 40 percent or less chance of 0.10 inches or greater of precipitation in the next 48 hours as forecasted by National Oceanic and Atmospheric Association, shall be required for the scheduling of any bridge or bank stabilization-related concrete pours. If a bridge or bank stabilization-related concrete pour is in progress, and an un-forecasted rain event occurs, bridge or bank stabilization-related concrete pours shall be suspended.

3-1f: During all storm events (including summer rains), a monitor shall inspect work sites to make sure that site is secure and that flooding does not cause tarps to break or diversion drains to become plugged potentially allowing construction materials and debris to flow into the river.

3-1g: Precautionary spill containment devices shall be deployed and maintained during any pouring of concrete related to the bridge structure where released materials or storm water runoff that may have come in contact with uncured concrete could be released to the wetted channel of the Santa Clara River. Containment may be integrated into the K-rail barrier along the perimeter of the Work Zone or may be underslung or integrated into the bridge structure itself (such as storm drain system for the roadway that is directed to a water quality treatment facility within the development areas north or south of the bridge crossing).

3-1h: A K-rail construction barrier shall be deployed between the bridge construction work zone and the wetted channel of the Santa Clara River. A discussion of access restrictions shall be included in the required Worker Environmental Awareness Program training (Mitigation Measure BIO-52 from the 2010 Final EIR).

3-1i: Spill containment shall be deployed and maintained during CIDH pile construction, bridge column construction, cast-in-place girder construction, bridge deck pours, and any other pouring of concrete related to the bridge structure where released materials or storm water runoff that may have come in contact with uncured concrete could be released to the wetted channel of the Santa Clara River. Containment shall be integrated into the K-rail barrier along the perimeter of the work zone or underslung tarp or integrated into the bridge structure itself (such as storm drain system for the roadway that is directed to a water quality treatment facility within the development areas north or south of the bridge crossing).

3-1j: To prevent construction debris from falling into the Santa Clara River during installation of bridge decks, the deck areas shall be fitted with an under-slung debris tarp, debris platform, or equivalent protection, extending at least 50 feet beyond the width of the wetted channel. The project applicant or its designee shall perform periodic maintenance and inspection to ensure that the debris catchment system is performing correctly.

3-1k: To ascertain that water quality is not being affected by bridge and bank stabilization-related concrete pouring activities, the project applicant or its designee shall monitor the water quality at points, upstream, downstream, and immediately adjacent to the ~~bridge~~ construction work zone daily during concrete pouring operations and report the results monthly, or as directed, to CDFW. Key parameters to be monitored include pH and turbidity.

3-1l: All bridge maintenance and repair activities, as described in the RMDP Maintenance Manual, that have the potential to affect the wetted channel of the Santa Clara River shall adhere to the dry season window, as defined for this project, as June 1 through September 30, and shall completely avoid the Santa Clara River wetted channel when performing maintenance activities. All measures implemented during original bridge construction shall also be implemented to avoid accidental contact, spills, or falling debris into the wetted channel. In the future, if the wetted portion of the Santa Clara River shifts in location (for example, in response to a flood event that alters the ~~geomorphology of the channel~~ wetted channel alignment), all maintenance and repair activities shall also be required occur outside of the wetted channel.

Significance after Mitigation

Implementation of Mitigation Measure 3-1 along with those from the 2010 Final EIR (except BIO-44 and BIO-46) would reduce potentially significant impacts on unarmored threespine stickleback from construction activities of the permanent bridges to a **less-than-significant** level, because it would require that the project applicant or its designee implement the adopted PDFs that include restricting bridge component construction to the dry season, as defined for this project, to June 1 through September 30, and completely avoid the Santa Clara River wetted channel by modifying the construction methods. Mitigation Measure 3-1 also requires that the project applicant or its designee install an under-slung debris tarp, debris platform, or equivalent protection extending 50 feet beyond the width of the wetted channel to prevent falling bridge construction material from reaching the river, and daily monitoring water quality during concrete pouring operations to ascertain that water quality is not being affected. Because the impacts to aquatic habitat would be avoided, the proposed modified construction methods can be implemented consistent with Fish and Game Code section 5515. The impact would be **less than significant**.

Impact 3-2: Construction, Operation, and Demobilization of Temporary Haul Routes Bridges

Construction and operation of the temporary haul route bridges would result in installation of bridge support piers within the Santa Clara River channel that provides habitat for the unarmored threespine stickleback. Vibratory pile driving methods will be used to install haul route bridge support piles, however vibratory pile driving is not expected to injure or disturb unarmored threespine stickleback. This impact is less than significant and, therefore, no mitigation is needed.

Construction activities, such as accidental entry into the wetted channel, method and timing of installation of the decks and falling construction debris from bridge decks into the water, could lead to direct mortality or injury to unarmored threespine stickleback. This would be a **potentially significant impact without implementation of mitigation**. The revised construction, operation, and demobilization of temporary haul routes bridges do not cause or create any other potentially significant impacts not already addressed in the 2010 Final EIR. The project applicant has proposed to modify temporary haul route bridge design and construction methods as mitigation to avoid take of unarmored threespine stickleback. Impacts to unarmored threespine stickleback from temporary haul route bridges would be **less than significant with these mitigation measures**.

Mitigation Measure 3-2: Construction, Operation, and Demobilization of Temporary Haul Route Bridges

The project applicant, or its designated general contractor, shall implement the following measures to avoid unarmored threespine stickleback.

3-2a: Implement Mitigation Measure 3-1a, 3-1b, ~~3-1e,~~ and 3-1f.

3-2b: Prior to the commencement of construction activities, a qualified biologist shall survey the proposed work locations to confirm that the construction zone is outside the wetted channel of the river and that the proposed vibratory pile installation locations are at least 10 feet away from the wetted channel. Such surveys shall ensure that no work takes place where unarmored threespine stickleback may be affected.

3-2c: Vibratory piles for the temporary haul route bridges shall be installed no closer than 10 feet to the wetted channel of the Santa Clara River, as determined by survey at the time piles are to be installed, and shall only be removed by vibratory methods if the wetted channel is at least 10 feet away.

3-2d: No construction activities or personnel shall occur near the edge of the wetted channel that would have potential to destabilize low flow channel bank. A set-back from the edge of the top of bank for a horizontal distance that is twice the bank height (2 horizontal: 1 vertical) shall be maintained to prevent collapsing the bank of the low flow channel.

3-2e: During temporary haul route bridge construction and demobilization, a qualified biologist shall monitor all activities that are a threat to adjacent natural habitats or nearby species and ensure no equipment, personnel or debris enter or makes contact with the wetted channel of the River.

Significance after Mitigation

Implementing Mitigation Measure 3-2 would reduce potentially significant impacts on unarmored threespine stickleback from installation, operation, and demobilization activities of the temporary haul route bridges to a less-than-significant level because it would require that the PDFs are implemented, which include the dry season work restrictions, and that the temporary haul route bridge installation, operation, and demobilization completely avoid the wetted channel of the Santa Clara River. Furthermore, Mitigation Measure 3-2 would require that a qualified biologist monitor the installation and demobilization activities to ensure that construction stays outside of the wetted portion of the river and that the temporary pile locations are at least 10 feet away from the edge of the wetted portion of the river. Implementation of these measures would ensure that the installation, operation, and demobilization of the temporary haul route bridges avoid aquatic habitat where unarmored threespine stickleback could occur. Impacts to aquatic habitat would be avoided; therefore, the proposed construction methods can be implemented consistent with Fish and Game Code section 5515. The impact would be **less than significant**.

Impact 3-3: Bank Stabilization Construction

Construction of the bank stabilization measures would occur within the Santa Clara River, which provides habitat for the unarmored threespine stickleback. Bank stabilization locations located within the floodplain could become inundated during winter flows. In addition, the San Jose Flats area is at risk of inundation during late spring or early fall storm events. Inundation of bank stabilization areas could lead to stranding of unarmored threespine stickleback. This would be a **potentially significant impact without mitigation**. The project applicant has proposed to modify bank stabilization methods as mitigation to avoid take of unarmored threespine stickleback. Impacts to unarmored threespine stickleback from bank stabilization would be **less than significant with these mitigation measures**.

Mitigation 3-3: Bank Stabilization Construction

The project applicant or its designated contractor shall implement the following measures:

3-3a: Implement Mitigation Measure 3-1a, 3-1b, 3-1e~~,~~ ~~and~~ 3-1f, and 3-1k.

3-3b: Prior to the commencement of bank stabilization construction activities, a qualified biologist shall survey the proposed work locations to confirm that the construction zone is outside the wetted channel of the river and that construction Best Management Practices (BMPs) are installed prior to construction. Such surveys shall ensure that no work takes place where fish may be affected.

3-3c: Bank stabilization construction at the San Jose Flats area of Mission Village is restricted to the dry season, as defined as between June 1 and September 30 to preclude the construction work zone from being inundated by seasonal flood flows.

3-3d: Bank stabilization construction locations susceptible to winter flood flows shall be conducted from May 1 through November 30, when winter flood flows do not occur on the Santa Clara River. Other bank stabilization areas not at risk of flood flows shall be constructed year-round.

3-3e: Although a late-spring or early fall flood event is not expected to occur, the project applicant or its designated contractor shall implement Perimeter BMPs, as required under the Environmental Protection Agency's Construction National Pollutant Discharge Elimination System permit, which would deflect minor flows (less than 12 inches deep, and less than ~~15~~ 8 fps velocities) from entering bank protection construction work zones

3-3f: The project applicant or its designee shall develop a Construction Groundwater Dewatering Plan for those areas (i.e., bank stabilization areas) in close proximity to stream flow and submit to CDFW for approval. The plan shall include the following measures and be conducted during construction groundwater dewatering activities:

- Operational restriction on dewatering addressed in the 2010 Final EIR require that any dewatering be conducted in a manner that does not affect river flow, and these same restrictions shall be observed going forward. Bank stabilization dewatering shall be implemented in a manner that (1) does not create temporary wetted channel habitat suitable for stickleback; (2) does not diminish existing river flow, and therefore does not result in stranding of unarmored threespine stickleback or other fish; and (3) does not introduce pollutants to surface waters.

- Dewatering activities shall not involve direct removal of surface water from, or discharge to the Santa Clara River. Nor shall such activities result in any draw-down of the river's flow such that fish may become stranded. Any groundwater discharges shall be directed to an appropriate and legal disposal site in an upland area that will not affect the surface elevation of the wetted channel of the Santa Clara River.

- The project applicant or its designee shall assess local stream and groundwater conditions, including flow depths, groundwater elevations, and anticipated dewatering cone of influence (radius of draw down).

- The project applicant or its designee shall monitor surface water elevations upstream, adjacent to, and downstream of the extraction points, to assess any critical flow regimes susceptible to excessive draw down before, during and after groundwater dewatering activities. The designated monitor shall have the authority to halt dewatering activities if water levels decrease in the wetted portion of the Santa Clara River where unarmored threespine stickleback are present. In the event the designated monitor observes an effect on the wetted channel that necessitates halting of dewatering operations, the applicant will be required to consult with CDFW, revise the Construction Groundwater Dewatering Plan as appropriate, and implement whatever additional

restrictions may be necessary to preclude impact to the wetted channel (such as limiting the extent of excavation dewatering, implementing other construction methods acceptable to the Los Angeles County Department of Public Works such as launch stone, or suspending construction until such time as regional groundwater conditions are more favorable for the construction to proceed).

- The project applicant or its designee shall monitor surface water elevations downstream of the project location to assess any flow regimes and overbank areas that may be susceptible to flooding.
- The project applicant or its designee shall monitor upland discharge locations for potential channel erosion from dewatering discharge, and appropriate BMPs must be implemented to prevent excessive erosion or turbidity in the discharge.
- Monitoring reports shall be summarized and provided to CDFW upon completion of construction activities that required dewatering.

Significance after Mitigation

Implementing Mitigation Measure 3-3 would reduce potentially significant impacts on unarmored threespine stickleback from bank stabilization activities to a less-than-significant level because it would require that the PDFs are implemented, which include the dry season work restrictions to avoid accidental flooding and potential stranding within the work zone. Additionally, Mitigation Measure 3-3 would require the preparation of a Groundwater Dewatering Plan to be submitted for approval to CDFW. The plan would include measures that would prevent fluctuations in the surface level of the Santa Clara River that could result in stranding of unarmored threespine stickleback. Because adverse impacts to aquatic habitat would be avoided, the proposed construction methods can be implemented consistent with Fish and Game Code section 5515. The impact would be **less than significant**.

Impact 3-4: New or Substantially More Severe Significant Impacts to Unarmored Threespine Stickleback or Other Biological Resources

Modifications to the design and construction methods of the temporary haul route bridges, permanent project bridges, and bank stabilization would introduce environmentally protective features and would not modify the location or area of construction disturbance, compared to project evaluated in the 2010 Final EIR. The temporary haul route bridges, permanent bridge alignment, and bank stabilization locations determine the area of disturbance, because these areas must be cleared of vegetation and are within active construction zones. The currently proposed temporary haul route, permanent bridge alignment, and bank stabilization locations would be essentially identical to the 2010 Final EIR's project description. Therefore, **no new significant impacts nor substantial increases in the severity of previously identified significant impacts would occur** related to unarmored threespine stickleback, other fish and wildlife species, or their habitats.

Mitigation Measures

No mitigation is required.