Village 13 Project's Global Response R1: Carbon Offsets

Global Response R1: Carbon Offsets

This response addresses comments received on the 2019 Recirculated Portions of the Draft Environmental Impact Report (EIR) stating that the Otay Ranch Resort Village – Village 13 (proposed Project or Project) has not sufficiently demonstrated that the carbon offsets required by mitigation measures M-GCC-7 and M-GCC-8 would effectively reduce greenhouse gas (GHG) emissions. The referenced mitigation measures require the Project to reduce its estimated construction and operational GHG emissions to net zero (following the implementation of environmental design considerations (EDCs) and mitigation measures M-GCC-1 through M-GCC-6 for the reduction of GHG emissions through on-site strategies), so that the Project results in no net increase above the existing emissions level (which conservatively is assumed to be zero), through the purchase of carbon offsets.

In light of those comments, this response provides additional information regarding carbon offsets and the carbon registries that oversee the environmental integrity of offsets through measured substantive and procedural standards; sets forth substantial evidence regarding the additionality, availability, effectiveness and temporal duration of the mitigation obligation; and, describes how use of carbon offsets is not in violation of the County of San Diego General Plan.

On June 12, 2020, the Fourth District Court of Appeal published its decision in *Sierra Club v. County of San Diego* (Case No. D075478), which addressed, in relevant part, standards for adequate carbon offsets mitigation under CEQA. In response to that decision's holdings, mitigation measures M-GCC-7 and M-GCC-8 have been refined, augmented and strengthened in rigor to provide additional clarity and information regarding the standards that the County would apply to the use of carbon offsets in the event of Project approval. As updated, mitigation measures M-GCC-7 and M-GCC-8:

- Set forth standards for eligible carbon offset protocols and methodologies, and attach a compilation of specific protocols and methodologies eligible for use that have been reviewed by the County and found to establish and require carbon offset projects to comply with standards designed to achieve additional, real, permanent, quantifiable, verifiable and enforceable reductions (see mitigation measure M-GCC-7 Attachment "A");
- Require that offsets meet rigorous standards of environmental integrity by explicitly incorporating in the body of the mitigation measures the requirements that offsets be additional, real, permanent, quantifiable, verifiable and enforceable, as well as the definitions of those terms;
- Identify objective locational performance standards, and require that compliance with such standards be proven through the use of all available carbon offsets within a respective rung of the geographic priority listing before utilization of offsets originating from the next priority location;
- Eliminate the use of international offsets; and
- Establish express reporting and enforcement standards to underscore that Project permitting shall not proceed in the absence of objective and verifiable evidence that the Project Applicants have retired a sufficient quantity of adequate carbon offsets to reduce emissions from construction and operations associated with the corresponding grading and building permits. Safeguards also have been added in the event that the County determines that a previously retired offset is not compliant with the stringent standards set forth in the mitigation measures. A processing checklist and flowchart have been added to detail the precise implementation and administration process (see mitigation measure M-GCC-7 Attachment "B").

Mitigation measures M-GCC-7 and M-GCC-8, as updated, are presented in full in Subsection 2.10.5, Mitigation, of EIR Section 2.10, Global Climate Change.

Project Mitigation Requires Rigorous Standards to Ensure the Environmental Integrity of Carbon Offsets

Overview of Carbon Offsets

Carbon offsets are instruments that can be bought, sold, and traded. Like a stock or equity that represents a unit of ownership in a company, a carbon offset represents a unit of GHG emissions reductions. Each offset is a certification that a certain quantity of GHG emissions has been or is forecasted to be avoided, prevented, or sequestered. Examples of activities that generate offsets include reforestation to increase carbon sequestration and the capture and destruction of methane emissions from livestock.

Carbon Offsets Must Meet Certain Standards

An activity can only generate registry-issued carbon offsets if the project developer demonstrates the environmental integrity of the activity by meeting specific standards. Therefore, offset registries have developed a broad consensus around the standards that are necessary to ensure that offsets are environmentally sound, namely that offsets be real, permanent, quantifiable, verifiable, enforceable, and additional, defined as follows:

> "Real": offsets may only be issued for emissions reductions that are a result of complete emissions accounting. This means that the GHG reduction underlying the carbon offset must result from a demonstrable action or set of actions, and be quantified using appropriate, accurate, and conservative methodologies that account for all GHG emissions sources and sinks within the boundary of the applicable carbon offset project, uncertainty, and the potential for activity-shifting leakage and market-shifting leakage.
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> "Permanent": the emissions reductions must be permanent and not be reversed; or, when the reduction may be reversible, a mechanism must be in place to replace any reversed emissions reductions. For example, in the context of forestry, offset project developers must demonstrate that the carbon sequestered in the trees of the forest will not be released to the atmosphere after the fact; i.e., that the trees will not be cut down. Recognizing that unanticipated events are possible, and in order to ensure permanency, registries maintain a number of un-retired carbon offsets in a separate "buffer pool" that can be used in the event that a previously implemented reduction is reversed. Continuing with the forestry example, offsets from a buffer pool could be used to replace reductions lost due to fire. Attachment GR.R1.1 of these Responses to Comments contains additional information regarding how each registry's "buffer pool" ensures the permanency of the offsets it issues.
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> "Quantifiable": the emissions reductions from an activity must be rigorously quantified, and offsets may only be issued in an amount that corresponds to emissions that have been quantified. Project developers must ensure the accuracy of their emissions accounting by adhering to standardized quantification methodologies called "protocols," which are discussed further below.
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> "Verifiable": to receive offset credits, emission reductions must be well documented and transparent enough to be capable of objective review by a neutral, third party verifier that is accredited through the American National Standards Institute (ANSI). The registries require that the third-party verification include a review of all documentation, monitoring data, and procedures used to estimate GHG reductions, and culminate in the verification body's issuance of a report and statement that identifies the quantity of carbon offsets that can be issued to the carbon offset project. As part of the report and statement, the independent third-party verifies that the carbon offset project has adhered to the pertinent protocol or methodology (see below for further discussion of such protocols and methodologies) in order to confirm that the carbon offset project's GHG

reductions are real, permanent, quantifiable, enforceable and additional. Attachment GR.R1.1 of these Responses to Comments contains examples of the verification reports submitted to registries and related documents.

"Enforceable": in order to be eligible to generate offsets from reputable programs, the implementation of the activity must represent the legally binding commitment of the offset project developer. Once the developer undertakes the activity, the developer is under a legal obligation to carry it out.

(Separate from the registries' environmental integrity standards discussed herein, CEQA Guidelines Section 15126.4(a)(2) provides that "[m]itigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments." In the case of the proposed Project, mitigation measures M-GCC-7 and M-GCC-8 would be made fully enforceable through the County's adoption of a Mitigation Monitoring and Reporting Program (MMRP) and corresponding Conditions of Approval in the event that the County's Board of Supervisors certifies this EIR and approves the Project. Mitigation measures M-GCC-7 and M-GCC-8 provide the County with sufficient enforcement avenues because the issuance of grading and building permits is tied to and contingent upon the satisfactory retirement of carbon offsets compliant with the articulated mitigation standards. If satisfactory carbon offsets are not retired, permits shall not issue and no environmental impacts requiring mitigation shall occur. Further, should the County determine that previously retired carbon offsets no longer meet the mitigation standards, the County shall not resume Project permitting activities until the Project Applicants have demonstrated compliance with those standards or undertaken and completed necessary corrective action.)

"Additional": the GHG emissions reductions generated by an activity must be "additional," meaning that they are only eligible to generate offsets if they would not have occurred without the offset activity. Project developers must ensure additionality by adhering to the applicable protocol, as discussed further below.

In order to assess whether a carbon offset project results in "additional" reductions, the protocols and methodologies adopted by the registries utilize legal requirement and performance standard tests. A carbon offset project passes the legal requirement test when there are no laws, statutes, regulations, court orders, environmental mitigation agreements, permitting conditions, or other legally binding mandates requiring its implementation, or requiring the implementation of similar measures that would achieve equivalent levels of GHG emission reductions. A carbon offset project passes the performance standard test when – in the absence of a carbon offset market – the project would have insufficient financial returns or would face other types of insurmountable economic, social or technological implementation barriers. If the registry finds that the carbon offset project does not pass either the legal requirement test or performance standard test, then the project is not eligible for the issuance of carbon offsets. For example, a livestock project may not receive offset credits for the operation of a biogas system at a farm if the farm had to operate a biogas control system as a condition of a permit to operate issued by a local air district or other permitting authority.

Different offset programs have adopted slightly different versions of these standards, but the differences are non-substantive.[1] Further, these environmental integrity criteria are broadly recognized as sufficient to ensure the environmental benefit of activities that generate carbon offsets.[2]

Climate Registries Use Standardized Protocols and a Rigorous Review Process to Approve Offsets

Carbon offsets are issued by a climate registry that has undertaken the responsibility of certifying that the action or activity that results in emissions reductions has occurred. Climate registries are focused on achieving environmental integrity via the standards discussed in the prior subsection because – even in the arena of "voluntary" offsets – principles of accountability and transparency drive the marketability of offsets. To this end, the Climate Action Reserve began as the California Climate Action Registry, which was created by the State of California in 2001 to address climate change through voluntary calculation and public reporting of emissions. The Reserve establishes high quality standards for carbon offset projects, oversees independent third-party verification bodies, issues carbon credits generated from such projects and tracks the transaction of credits over time in a transparent, publicly accessible system. Verra and the American Carbon Registry are similarly multi-dimensional – the registries develop and administer programs for the creation, implementation and verification of offset projects.

In order to ensure that carbon offset projects, and their implementing protocols and methodologies, meet the environmental integrity criteria targeted by the registries, each registry has issued a program manual and other supporting guidance that address the procedural and substantive standards that must be adhered to in order for a carbon offset project to culminate in the reduction and avoidance of GHG emissions. The program manuals and supporting guidance also address the procedural and substantive standards for issuance and retirement of carbon offsets. Copies of the registries' program manuals, which are updated from time to time, are included in mitigation measure M-GCC-7 Attachment "A" and include the American Carbon Registry's "The American Carbon Registry Standard" (July 2019); Climate Action Reserve's "Reserve Offset Program Manual" (November 2019) and "Climate Forward Program Manual" (March 2020); and Verra's "VCS Standard," "Program Guide" and "Methodology Requirements" (September 2019).

Developers of offsets can demonstrate the environmental integrity of an offset project by complying with a climate registry's standards-based "protocol" or "methodology" (hereafter generally referred to as "protocol"). Each protocol contains standards specific to the carbon offset project type that is the subject of the protocol and addresses items required by the program manuals, such as:

- Unique definitions and terms of art;
- Eligibility rules, including locational limits, project start dates and crediting periods, and criteria for establishing additionality;
- Resilience measures for project design;
- Quantification rules and criteria, including as to the GHG assessment boundary and methods for estimating baseline and project emissions;

[1] See generally American Carbon Registry, "The American Carbon Registry Standard" (July 2019); Climate Action Reserve, "Reserve Offset Program Manual" (November 2019) and "Climate Forward Program Manual" (March 2020); Verra, "VCS Standard," "Program Guide" and "Methodology Requirements" (September 2019). Copies of these program manuals are included in mitigation measure M-GCC-7 Attachment "A."

[2] See, e.g., *Our Children's Earth Foundation v. CARB* (2015) 234 Cal.App.4th 870; Three-Regions Offsets Working Group, "Ensuring Offset Quality: Design and Implementation Criteria for a High-Quality Offset Program" (May 2010) at pp. 3-4.

- Monitoring requirements and reporting parameters; and,
- Verification and confirmation standards, including record retention.

Eligible protocols and methodologies are included in mitigation measure M-GCC-7 Attachment "A." The protocols and methodologies contained therein include, but are not limited to, the Climate Action Reserve's U.S. Landfill Protocol (which is associated with installing landfill gas collection and destruction systems) and Dairy Digester Methodology (which is associated with the utilization of biogas control systems to capture and destroy methane from anaerobic manure treatment and/or storage facilities at dairies); the American Carbon Registry's Improved Forest Management Methodology for Non-Federal U.S. Forestlands (which is associated with enhanced sequestration activities relative to baseline forest management); and, Verra's Soil Carbon Quantification Methodology (which is associated with changes to agricultural practices, grassland and rangeland restorations, soil carbon protection and accrual benefits from reductions in erosion, and grassland protection projects).

The timeline for a registry's scoping and development of new project concepts that culminate in the adoption of protocols varies, depending on the project type and available information. Generally speaking, registry staff begins by conducting internal research regarding the viability of a project concept, which registry staff may identify on their own or which interested stakeholders may submit. The Climate Action Reserve considers the following, non-exclusive list of criteria when assessing the viability of a project concept for protocol development:[3]

- Whether the GHG reductions would occur outside of proposed or adopted caps on GHG emissions (e.g., the Climate Action Reserve does not consider fossil fuel combustion reduction projects in California for protocol development because the State's Cap-and-Trade Program covers fuel refineries);
- Whether the GHG reductions are direct or indirect;
- Whether the GHG reductions are likely to be additional;
- Whether there is significant potential for reducing GHG emissions in the United States;
- Whether well-developed quantification methodologies are available;
- Whether accurate and cost-effective measurement and monitoring techniques are available; and,
- Whether the projects would have positive or negative environmental and social co-effects.

If the concept shows promise and seems suitable for the development of a standardized protocol, the Climate Action Reserve – for example – will host a formal public scoping meeting and a subsequent protocol kickoff meeting. From that point forward, the Climate Action Reserve's process generally takes 6 to 12 months, or more, to reach protocol adoption.[4]

Attachment GR.R1.1 of these Responses to Comments contains additional information regarding the processes used by the registries to establish new and update existing protocols. As summarized therein, each registry engages in public consultation and provides public review during the protocol development phase, affording interested members of the public and experts in the field an opportunity to provide input

[3] See the Climate Action Reserve's "Criteria for Protocol Development" webpage available at https://www.climateactionreserve.org/how/future-protocol-development/criteria/.

[4] For more information on the Climate Action Reserve's protocol development process, please see https://www.climateactionreserve.org/how/future-protocol-development/.

on the protocol. Draft protocols also are routinely subject to peer review by independent experts in the field, which often results in an iterative process that refines the standards contained in each draft protocol. Further, each registry only approves a protocol if it determines that the protocol complies with its program manual and will generate carbon offsets with sufficient environmental integrity. The referenced information located in Attachment GR.R1.1 also includes a table illustrating the public consultation process, using concrete examples of protocol development undertaken by the Climate Action Reserve, American Carbon Registry, and Verra.

Carbon offset registries measure compliance with approved protocols using rigorous, standardized review processes. As a general rule, when approving a GHG reduction project, the climate registry would require that the offset project meet the following steps to receive offsets:

> Listing or Registration: Apply to list or register the proposed GHG emission reduction project with the climate registry. The climate registry will review the application and accept it only if it complies with the applicable climate registry requirements.
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> Independent, Qualified Third-Party Confirmation of Reduction or Sequestration: Once a GHG emission reduction project has begun, the climate registry will require the offset project developer to retain an independent, qualified, third-party to verify the reduction or sequestration achieved by the project. Each climate registry has adopted stringent requirements applicable to the accreditation of third parties and only such third parties are qualified to verify and audit the activities under the applicable registry rules. The verification and audit process typically takes place on an annual basis. Activities undertaken in a given 12-month period are typically verified during the following 6-12 months. Most climate registry rules and protocols require "boots on the ground" audits by accredited third parties, although in certain instances desktop reviews by the third-party verifier may be sufficient.
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> Registry Approval and Issuance: The final step under most climate registry rules and protocols involves the issuance of the offsets. Registry rules and protocols require the project developer to apply for issuance and to provide the verification report prepared by the independent, qualified third-party. The registry will typically review a verification report and, to the extent that the registry finds that the report complies with the applicable registry requirements, the registry will issue the offsets to the account of the project developer.
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> Carbon Offset Retirement: Each registry has adopted rules and procedures governing the retirement or cancellation of offsets. Typically, these rules or procedures involve the transfer of the offset serial numbers from a registry account and ensure that once a carbon offset credit has been retired, the retirement is permanent and the carbon offset cannot be further used in any manner.

These protocols and processes ensure that offsets issued by offset registries satisfy the environmental integrity criteria described above, as multiple agencies and jurisdictions implementing such programs have recognized. Indeed, during rulemaking for the Cap-and-Trade Program, CARB stated:

> "Beginning in 2005, the Climate Action Reserve … began adopting voluntary GHG accounting protocols to encourage early action to reduce GHG emissions. [C]ARB recognizes the rigor of the voluntary accounting procedures CAR adopted to establish that

GHG emissions are real, additional, and permanent."[5,6]

Indeed, the carbon offset standards and criteria set forth in mitigation measures M-GCC-7- and M-GCC-8 are similar to those contained in the "Newhall Ranch Greenhouse Gas Reduction Plan," which is a State-approved plan for the use of carbon offsets. (See **Appendix C-27** of the EIR for a copy of the referenced plan.) The County notes, however, that the Project's carbon offset mitigation measures are not and do not need to be identical to that plan because the development of mitigation is not uniform or one-size-fits-all, but rather reflects project-specific application. CEQA affords each lead agency with the ability to exercise its discretion, provided that substantial evidence supports the approach taken.

Additional background materials regarding carbon offsets included in Attachment GR.R1.1 of these Responses to Comments show the environmental integrity of the offsets issued by the registries above and broad recognition of that integrity. Those materials include pertinent excerpts from the Cap-and-Trade Program and Senate Bill (SB) 97 rulemaking proceedings; information regarding the Climate Action Reserve, Verra and American Carbon Registry; letters from the California Air Resources Board (CARB) regarding the Newhall Ranch Project's mitigation framework, which includes offsets; information regarding the Climate Action Reserve's Climate Forward Program[7]; and, information regarding forest offset protocols.

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5 CARB, "Proposed Regulation to Implement the California Cap-and-Trade Program, Part I, Volume I: Initial Statement of Reasons" (October 28, 2010) at II-48.

6 There is a broad consensus on the accounting principles necessary to ensure environmentally sound offsets. The standards include International Organization for Standardization (ISO) 14064 and 14065, and the World Resources Institute/World Business Council for Sustainable Development (WRI/WBCSD) Greenhouse Gas Protocol for Project Accounting. The ISO is an independent, non-governmental international organization with a membership of 162 countries, including the United States. The ISO publishes standards for a wide variety of industrial activities, such as food safety management, medical device management, and anti-bribery management. (See ISO, "Standards" available at http://www.iso.org/iso/home/standards.htm.) The ISO is an independent, neutral developer of standards, including GHG emission reduction accounting standards. The WRI is a global research organization focused on addressing the nexus of environment, economic opportunity and human well-being, and the WBCSD is a global, CEO-led organization working to accelerate the transition to a sustainable world. As described in Section IX.A.1 of **Appendix C-27**, the accounting standards consider transparency and monitoring; relevance; completeness; consistency; accuracy; and conservativeness.

7 The Climate Action Reserve recently launched the "Climate Forward" program, under which it approves "standardized and conservative quantification methodologies for assessing the forecasted (ex-ante) emission reductions of GHG reduction projects and issue[] credits for the mitigation measures. These forward-looking credits can then be used to mitigate the GHG emissions impact of future projects that a company or organization might undertake." For more information on Climate Forward, please see http://www.climateactionreserve.org/climate-forward/ and http://www.climateactionreserve.org/climate-forward/fmus/.

As provided in the "Climate Forward Program Manual," the program "recognize[s] investments now that will reduce [GHG] emissions in order to mitigate emissions that will occur in the future from new types of economic activity (e.g., …housing development …)." While Forecasted Mitigation Units (FMUs) issued under the program reflect mitigation actions that will produce a future stream of emission reductions, the FMUs only can be issued *after* an accredited confirmation body determines that the emissions-reducing project "has been implemented as described in the forecast methodology, and that the estimated emission reductions have been calculated accurately." It also is noted that the Reserve deploys multiple strategies to minimize potential underperformance in the program, such as "avoiding project types with unacceptably high risk, requiring implementation of 'resilience measures' to mitigate risks of project failure or under-performance, conservative GHG accounting approaches, and the use of a risk pool." FMUs have been retired for CEQA mitigation purposes in other jurisdictions, as disclosed on the Reserve's Retired Mitigation Units report available at https://climateforward.apx.com/.

Relationship of Project Mitigation to CARB's Compliance Offsets under the Cap-and-Trade Program

The Quantitative Limits on Offsets Established for Cap-and-Trade Program Covered Entities Do Not and Should Not Apply to This Land Use Development Project

Several comments have referred to the Cap-and-Trade Program's quantitative limits on the use of a Cap-and-Trade Program regulated entity's carbon offsets, opining that the proposed Project is allowed to mitigate too large of a percentage of its emissions inventory through off-site carbon offsets. Such limits do not apply and should not be applied to this land use development project.

As background, regulated entities subject to the Cap-and-Trade Program may use compliance offsets to meet up to 8 percent of their compliance obligation for emissions through 2020; 4 percent of their compliance obligation for emissions from 2021-2025; and 6 percent for emissions from 2026-2030. Starting with 2021 emissions, no more than one half of the quantitative usage limit may be sourced from carbon offset projects that do not provide direct environmental benefits in California.

The County notes first that such limits do not apply to this land use development project. As discussed above, under CEQA, the County has the discretion to identify and implement appropriate mitigation for identified significant environmental impacts of a project. It is notable that both on-site and off-site GHG reduction activities have been identified here to reduce the proposed Project's GHG emissions.

Second, such limits should not apply to this Project as the operation of a land use development project is distinct and disparate from the operation of entities regulated under the Cap-and-Trade Program. The Cap-and-Trade Program's typical "covered entities" include electric power plants, large industrial plants, and fuel distributors that are responsible for about 85 percent of California's GHG emissions. Entities regulated by the Cap-and-Trade Program, therefore, generally have direct operational control of the long-term GHG emissions from the source profile. On the other hand, land use developers do not have continuing control and authority over most, if not all, of the sources of GHG emissions. For example, homeowners decide when to turn appliances on and off; business owners decide their hours of operation; drivers select the type of vehicle they will operate; etc. Practically speaking, this limits the suite of on-site reduction strategies that a land use developer can use to reduce GHG emissions, unlike those covered entities under the Cap-and-Trade Program.

Third, the County notes that covered entities (e.g., fuel refineries) regulated by the Cap-and-Trade Program are not presently required by the Program to achieve a level of "net zero" GHG emissions. Rather, such entities are subject to a declining GHG emissions cap that gradually and incrementally reduces emissions from the regulated emissions-generating activities.[8] For example, between 2015 and 2020, the Cap-and-Trade Program's emissions cap declined about three percent each year; between 2021 and 2030, the emissions cap is designed to decrease an additional five percent.[9] As such, covered entities are permitted to emit a certain, positive quantity of GHG emissions. By contrast, the Project is proposing to achieve net zero GHG emissions in order to avoid a cumulatively considerable contribution to global climate change. These important distinctions between the Cap-and-Trade Program's covered entities and the proposed Project are important distinguishing factors that the County has considered when designing the proposed Project EIR's framework for the reduction of GHG emissions.

[8] CARB, "Overview of ARB Emissions Trading Program" (February 2015), available at https://www.arb.ca.gov/cc/capandtrade/guidance/cap_trade_overview.pdf.

[9] See Center for Climate and Energy Solutions, "California Cap and Trade" webpage, available at https://www.c2es.org/content/california-cap-and-trade/.

Offsets Used by Land Use Development Projects Are Not Issued by CARB or Issued Pursuant to "CARB-Approved" Protocols

It has been suggested that the Project should be limited to use of "compliance offsets" issued by CARB under the Cap-and-Trade Program, or offsets issued under "CARB-approved" protocols. Such limitations would be infeasible and inconsistent with CARB's own approach relative to land use development projects.

First, the Project is not a regulated entity covered by and subject to CARB's Cap-and-Trade Program. As a land use development project, the Project does not participate in the Cap-and-Trade Program. The carbon offsets purchased by the proposed Project must be from the voluntary marketplace, and are not Cap-and-Trade compliance offsets administered and issued by CARB.

Second, the Project also cannot be restricted to use of only "CARB-approved protocols" because CARB does not review or approve protocols for the voluntary marketplace. Specifically, CARB does not adopt or approve protocols developed by the Climate Action Reserve, American Carbon Registry or Verra for voluntary carbon offsets. Rather, CARB only adopts and approves regulatory protocols that it administers for compliance offset credits under the Cap-and-Trade Program. CARB does periodically review, however, voluntary offset protocols developed by the Climate Action Reserve, American Carbon Registry and Verra to determine whether they identify reduction pathways that should be made available via compliance offset protocols; this approach affirms that CARB recognizes the integrity of these registries, as well as the offsets programs they administer. The fact that a voluntary offset protocol has not been developed by CARB into a compliance offset protocol does not suggest the voluntary protocol lacks sufficient environmental integrity or effectiveness. As explained by CARB, numerous factors influence its selection and development of compliance offset protocols; for example, it only develops compliance protocols for sources outside of the industrial, energy and transportation sectors that are otherwise regulated and capped by the Cap-and-Trade Program. Further, CARB only needs to develop compliance offset protocols sufficient to meet the demand for offsets generated by the Cap-and-Trade Program's covered entities. Importantly, CARB has expressly stated that its decision not to develop a compliance offset protocol does not preclude the development of voluntary offsets.[10]

Third, the Project's utilization of carbon offsets from the voluntary marketplace for purposes of CEQA mitigation is consistent with the approach taken by CARB when issuing its "net zero" determinations under AB 900. As discussed further below, CARB has regularly approved the use of voluntary offsets for AB 900-compliant land use projects, recognizing the integrity of offsets sold in the voluntary marketplace. All three of these registries are considered "accredited" by CARB in the CEQA mitigation context under AB 900, as further discussed below.

<u>CARB's Certification of AB 900 Projects Establishes Precedent for Use of Voluntary Carbon Offsets by Land Use Development Projects to Achieve Net Zero Emissions</u>

The certification of projects under AB 900, the Jobs and Economic Improvement through Environmental Leadership Act, also supports the use of offsets. Under that statute, certain CEQA streamlining benefits are provided to "environmental leadership" projects. One of the key conditions for streamlining eligibility under AB 900 is that such projects must offset all emissions to be "GHG neutral." (Pub. Resources Code Section 21183(c).)

[10] CARB, "California Air Resources Board's Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation" (May 2013), available at https://ww2.arb.ca.gov/sites/default/files/classic//cc/capandtrade/compliance-offset-protocol-process.pdf.

In issuing its GHG neutral determination for AB 900-compliant land use projects, CARB makes a determination that the applicant has committed to reduce emissions to net zero. AB 900 projects routinely use a combination of on-site GHG-reducing strategies and the purchase of voluntary carbon offsets from accredited registries to achieve the net zero standard. Several points of this determination are notable.

First, as part of the application process, AB 900 projects are not required to provide documentation of the specific types of offset projects or protocols/methodologies underlying the voluntary offsets that would be retired to achieve net zero reductions. Stated differently, CARB does not review or approve of the use of certain protocols/methodologies or carbon offset project types. Instead, CARB simply requires voluntary offsets be issued by an "accredited carbon registry" in a sufficient amount.[11] (As described in one of CARB's AB 900 project staff evaluations, an "accredited carbon registry" is a registry "such as the American Carbon Registry, Climate Action Reserve, and Verra.")[12]

Second, CARB does not implement quantitative limits on the use of voluntary offsets for AB 900 projects. For example, CARB recently made a net zero determination for the Balboa Reservoir Mixed-Use project on December 19, 2019.[13] That project would emit a total 90,993 MT CO_2e, or 111,650 MT CO_2e for the project variant. The project committed to securing 77,320 MT CO_2e in offsets for the project, or 94,076 MT CO_2e for the project variant. In other words, offsets would be used to mitigate for approximately 85 percent of project emissions, regardless of any design features ultimately implemented as part of the project. Similarly, in a December 17, 2019 determination for the California Northstate University Medical Center Project, CARB authorized the purchase of 775,622 MT CO_2e in offsets from accredited carbon registries to reduce project emissions to net zero for a 30-year period, in combination with the project's commitments to install solar photovoltaic panels, utilize a renewable energy program, install electric vehicle charging stations, administer a transportation demand management program and implement a vegetation plan to preserve existing and plant additional trees.[14] As a point of comparison, that project's on-site strategies were estimated to annually reduce emissions by approximately 12,815 MT CO_2e at build out.

Third, CARB does not review nor approve the offsets ultimately purchased for retirement by AB 900 projects. Rather, AB 900 projects must generally commit to executing contracts for the purchase of offsets from an accredited registry, which requirement is enforceable by the lead agency through incorporation in a mitigation monitoring and reporting program, development agreement, and/or project conditions of approval. Whether an applicant has purchased an adequate number of offsets from an accredited registry is a determination made by the lead agency for the project, not CARB.

Fourth, CARB has not mandated that AB 900 projects commit to offsets of local origin. And, CARB has determined that AB 900 projects can achieve the necessary GHG emissions reductions without imposing rigid, quantitative limits on the locational attributes of carbon offset credits. (See **Appendix C-26** of the EIR for additional details on CARB's review of AB 900 projects relative to locational attributes.)

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[11] California Jobs (AB 900) Submitted Applications, available at https://opr.ca.gov/ceqa/california-jobs.html.

[12] See page 15 of CARB's Staff Evaluation for the Inglewood Basketball and Entertainment Center Project (November 27, 2019), available at https://opr.ca.gov/ceqa/docs/ab900/20191202-AB987_IBEC_Carb_Determination_Letter.pdf.

[13] CARB, AB 900 Determination of No Net Additional Greenhouse Gas Emissions for Balboa Reservoir Mixed-Use Project (December 19, 2019), available at https://opr.ca.gov/ceqa/docs/ab900/20191220-AB900_Balboa_Reservoir_Mixed-Use_Project_CARB_Determination.pdf.

[14] CARB, AB 900 Determination of No Net Additional Greenhouse Gas Emissions for California Northstate University Medical Center Project (December 17, 2019), available at https://opr.ca.gov/ceqa/docs/ab900/20191220-AB900_California_Northstate_University_Medical_Center_Project_CARB_Determination.pdf.

To date, multiple projects have been designated as AB 900 leadership projects by CARB and the Governor, which projects have made a commitment to purchase GHG offset credits from the voluntary carbon marketplace to ensure carbon neutrality. A local example includes the Soitec Solar Energy Project, approved by the County of San Diego Board of Supervisors in 2015.[15] The Board of Supervisors approved this project with conditions of approval to purchase and retire carbon offsets. CARB's example in designating AB 900 projects shows how offsets may be appropriately used to reduce the GHG emissions of this land use development Project to net zero.

Carbon Offset Protocols Have Been Upheld By Courts

In *Our Children's Earth Foundation v. CARB* (2015) 234 Cal.App.4th 870, 880, the First Appellate District recognized the validity of carbon offsets:

> "[P]rotocols developed by the Climate Action Reserve (Reserve) employ a standards-based approach for ensuring additionality. The Reserve is a national nonprofit organization that (1) develops standards for evaluating, verifying and monitoring GHG emission inventories and reduction projects in North America; (2) issues offset credits for those projects; and (3) tracks offset credits over time 'in a transparent, publicly-accessible system.' A primary goal of the Reserve is to establish conservative GHG accounting which will ensure that GHG emission reductions are 'real, permanent, additional, verifiable, and enforceable by contract.' In formulating its standards-based protocols, the Reserve identifies types of emission reduction projects that are both subject to quantification and appropriate for assessment pursuant to performance-based additionality tests."

In 2011, CARB formally adopted its own protocols, which it took almost verbatim from Climate Action Reserve's protocols.[16] CARB's protocols were challenged as violating Assembly Bill (AB) 32 because they purportedly failed to accurately ensure additionality as required by the act, but the court sided with CARB, finding that CARB's protocols based on Climate Action Reserve's protocols are a "workable method of ensuring additionality with respect to offset credits." (*Our Children's Earth Foundation* at p. 889.) CARB has since expanded its program to accept carbon offsets issued under American Carbon Registry and Verified Carbon Standard methodologies, in addition to those from the Climate Action Reserve.[17]

Carbon Offsets Are Recognized as Appropriate and Legitimate CEQA Mitigation

The appropriateness of using offsets as CEQA mitigation for GHG emissions is well established. Specifically, CEQA Guidelines Section 15126.4(c)(3) provides that "[o]ff-site measures, including offsets that are not otherwise required," can be used to mitigate a project's GHG emissions.[18]

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[15] Information on AB 900 leadership projects is found at: http://www.opr.ca.gov/ceqa/california-jobs.html.

[16] See, e.g., CARB, "Compliance Offset Protocol Livestock Projects: Capturing and Destroying Methane from Manure Management Systems" (October 20, 2011).

[17] See, e.g., Cal. Code Regs., Tit. 17, Section 95990(c)(5).

It is noted that, under mitigation measures M-GCC-7 and M-GCC-8, the Project shall neither purchase offsets from the Clean Development Mechanism (CDM) registry nor purchase offsets generated under CDM protocols. The Project also will not retire carbon offsets from international projects.

[18] CEQA Guidelines Section 15126.4(a)(1)(D) states: "If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed." In this instance, and based on the type of information reasonably available at this time, the proposed Project's utilization of carbon

In promulgating the CEQA Guidelines for GHG mitigation, the California Natural Resources Agency (CNRA) and the Governor's Office of Planning and Research (OPR) addressed the legitimacy of offsets as follows:[19]

> "The Initial Statement of Reasons ... cites several sources discussing examples of offsets being used in a CEQA context. Further, the CARB Scoping Plan describes offsets as a way to provide regulated entities a source of low-cost emission reductions, and … encourage the spread of clean, efficient technology within and outside California. The Natural Resources Agency finds that the offset concept is consistent with the existing CEQA Guidelines' definition of 'mitigation,' which includes '[r]ectifying the impact by repairing, rehabilitating, or restoring the impacted environment' and '[c]ompensating for the impact by replacing or providing substitute resources or environments.'"

Similarly, when discussing "Project-Level Greenhouse Gas Emissions Reduction Actions and Thresholds" in *California's 2017 Climate Change Scoping Plan* (November 2017), CARB stated that, "Where further project design or regional investments are infeasible or not proven to be effective, it may be appropriate and feasible to mitigate project emissions through purchasing and retiring carbon credits."[20]

The Fourth District Court of Appeal's decision in *Sierra Club v. County of San Diego* (Case No. D075478) does not invalidate the use of offsets as CEQA mitigation. To the contrary, the Fourth District was clear that "[o]ur decision is not intended to be, and should not be construed as [a] blanket prohibition on using carbon offsets—even those originating outside of California—to mitigate GHG emissions under CEQA." The Fourth District relatedly acknowledged that "CEQA permits mitigation measures for GHG emissions to include offsite measures, including purchasing offsets." However, specific to the offset mitigation measure included in the County's Supplemental EIR for its Climate Action Plan, the Fourth District found mitigation was improperly deferred for failing to set forth sufficient performance standards and for delegating authority to a County official without objective criteria for implementation. (For additional information regarding the County's Climate Action Plan litigation and its relevance to the proposed Project's EIR, please see Global Response R2: County of San Diego Climate Action Plan.) As explained in the introductory portion of this Global Response, mitigation measures M-GCC-7 and M-GCC-8 have

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offsets – via implementation of M-GCC-7 and M-GCC-8 – is not expected to result in one or more significant effects because carbon registries prioritize protocols for offset project types that can create significant co-benefits and avoid those with significant negative social and environmental impacts.

In support of this determination, please see Climate Action Reserve's webpage regarding "Criteria for Protocol Development," available at http://www.climateactionreserve.org/how/future-protocol-development/criteria/. See also Climate Action Reserve's Program Manual (November 2019), available at http://www.climateactionreserve.org/how/program/program-manual/. As provided in Section 2.4.6 of the Program Manual, the Climate Action Reserve "requires project developers to demonstrate that their GHG projects will not undermine progress on other environmental issues such as air and water quality, endangered species and natural resource protection, and environmental justice." In order to ensure that such adverse effects are avoided, the Climate Action Reserve coordinates with government agencies and environmental representatives, requires project developers to demonstrate compliance with all applicable laws (including environmental regulations), and may include – within individual offset protocols – requirements specifically designed to serve as environmental and social safeguards.

[19] California Natural Resources Agency, *Final Statement of Reasons for Regulatory Action, Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97* (December 2009).

[20] Appendix B of *California's 2017 Climate Change Scoping Plan* provides that CEQA lead agencies should consider: (1) requiring projects to purchase carbon credits from credible offset registries, and (2) encouraging projects to select local and California-only carbon credits, where available.

been updated and augmented in response to the decision to incorporate additional performance standards and objective criteria. However, the overall purpose of the mitigation measures remains unchanged: to incorporate certain and enforceable mitigation, consistent with CEQA's requirements, to reduce the Project's GHG emissions to net zero through the retirement of carbon offsets.

CEQA Requirement of Additionality of Carbon Offsets

Besides the additionality standard for offsets required by the registries, the requirement for additionality is incorporated into the CEQA Guidelines. CNRA and OPR squarely addressed the issue of additionality when revising the CEQA Guidelines in response to the passage of SB 97 as follows:

> "[E]mission reductions that occur without a project would not normally qualify as mitigation … [T]his interpretation of the CEQA statute and case law is consistent with the Legislature's directive in AB 32 that reductions relied on as part of a market-based compliance mechanism must be 'in addition to any [GHG] emission reduction otherwise required by law or regulation, and any other [GHG] emission reduction that otherwise would occur.' [citation omitted] While AB 32 and CEQA are separate statutes, the additionality concept may be applied analytically in the latter as follows: [GHG] emission reductions that are otherwise required by law or regulation would be appropriately considered part of the existing baseline … Thus, … the Natural Resources Agency has revised section 15126.4(c)(3) to state that mitigation includes: 'Off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions.'"

(CNRA, *Final Statement of Reasons for Regulatory Action, Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97* (December 2009), pp. 88-89.)

Mitigation measures M-GCC-7 and M-GCC-8 explicitly require all carbon offsets to satisfy additionality requirements consistent with CEQA. Specifically, both measures require carbon offsets to represent the "…reduction or sequestration of one metric ton of carbon dioxide equivalent that is 'not otherwise required' (CEQA Guidelines Section 15126.4(c)(3))." Further, the measures define "additional" as that term is used by the Climate Action Reserve, American Carbon Registry and Verra to ensure the integrity of carbon offsets from projects that each registry administers. As such, carbon offsets purchased for the Project would be additional.

Availability of Carbon Offsets

Based on the County's research, it believes that sufficient carbon offsets are available for use within the CEQA context.[21] By way of example, the Climate Action Reserve has registered more than 140 million metric tons of GHG reductions and retired more than 40 million carbon offsets.[22] The Climate Action Reserve found that Ohio (77 projects) and California (69 projects) lead the nation in the number of offset projects registered.[23] The American Climate Registry announced its issuance of more than 100 million

[21] See, e.g., Unlocking Potential: State of the Voluntary Carbon Markets 2017, Ecosystem Marketplace, available at https://www.cbd.int/financial/2017docs/carbonmarket2017.pdf.

[22] See Climate Action Reserve, "2019 Annual Report," available at https://www.climateactionreserve.org/about-us/#annualreports.

[23] See Climate Action Reserve, "2019 Annual Report," available at https://www.climateactionreserve.org/about-us/#annualreports.

carbon offsets in August 2017,[24] and the Verified Carbon Standard (now referred to as Verra) has certified more than 1,600 projects that have removed or reduced more than 450 million metric tons of GHGs.[25]

Further, the development of offset projects is driven by market demand, which – at least in part – is influenced by California's strong environmental protection policies. As such, offset project developers are expected to continue to pursue carbon reduction opportunities and technologies to meet demand.

As to speculative concerns regarding the future unavailability of carbon offsets, the Project's mitigation triggers require that proof of a sufficient offset quantity be provided *before* issuance of grading and building permits. More specifically, the mitigation measures require carbon offsets to be secured by the Project in advance of when the projected emissions will be generated by the Project. Specifically, M-GCC-7 requires all of the construction and vegetation removal emissions associated with the Project to be offset "*prior to* the County's issuance of the Project's first grading permit." (2019 Recirculated Portions of the Draft EIR, p. 2.10-31; italics added.) M-GCC-8 similarly requires the operational emissions associated with Project to be offset via one of the two options: (i) prior to the issuance of the first building permit, the Project shall offset the total operational emissions inventory, as multiplied by 30 years; or (ii) prior to the issuance of each increment of building permits for the phased development of the Project, the Project shall offset that increment of the operational emissions inventory, as multiplied by 30 years. (2019 Recirculated Portions of the Draft EIR, p. 2.10-33.) In other words, each permitted activity that occurs within the Project Site would be required to reduce or sequester 30 years of projected operational emissions in advance of the emissions being generated. Therefore, if offsets are not available, permits will not be issued and Project-related emissions will not occur.

Duration of Mitigation Obligation

CEQA Guidelines Section 15064.4(a) requires a lead agency to make a "good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas [GHG] emissions resulting from a project." Section 15064.4(a)(1) further provides that a lead agency, when deciding whether to assess the significance of the project's emissions using a quantitative or qualitative approach, has the "discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence."

Here, mitigation measure M-GCC-8 requires the Project to purchase and retire carbon offsets in a quantity that is sufficient to reduce the Project's operational GHG emissions to net zero for a 30-year period. The County, as lead agency, has determined that a 30-year project life is the appropriate methodology for delineating the extent of the Project's GHG emissions inventory for purposes of mitigation measure M-GCC-8's applicable mitigation period. And, this discussion demonstrates that the use of 30-year project life is a methodological determination that is strongly supported on at least five grounds, each of which provides an independent basis for utilizing the subject analytic framework:

1. CARB, the state agency charged with the responsibility for and expertise to administer the State's GHG emissions policies (Health & Saf. Code Section 38510), has approved the use of a 30-year project life when mitigating operational GHG emissions associated with land use development projects in furtherance of achieving a no net increase in GHG emissions levels. Specifically, when working with the California Department of Fish and Wildlife (CDFW) to evaluate the environmental impacts of the Newhall Ranch Resource Management and Development Plan and

[24] See https://americancarbonregistry.org/news-events/program-announcements/acr-reaches-milestone-issuanceof-100-million-tonnes-of-greenhouse-gas-emissions-reductions.

[25] See http://verra.org/project/vcs-program/.

Spineflower Conservation Plan (RMDP/SCP), which would facilitate the development of a large-scale, master-planned community in Los Angeles County, CARB determined that utilization of a 30-year mitigation period would enable the RMDP/SCP project to achieve net zero GHG emissions.[26]

A 30-year project life also has been used and approved by CARB to calculate offset requirements for qualified "leadership projects" under AB 900 (Pub. Resources Code Sections 21178 through 21189.3). To obtain certification as a "leadership project," a project must, among other requirements, "not result in any net additional emission of [GHGs], including [GHG] emissions from employee transportation, as determined by CARB pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code." (Pub. Resources Code Section 21183(c).) As of this writing, all AB 900 projects submitted to CARB and the Governor for certification use a project life of 30 or fewer years when calculating GHG emissions reductions.[27]

2. The Project Site is located in the San Diego Air Basin and is under the jurisdiction of the San Diego Air Pollution Control District (SDAPCD). However, the SDAPCD does not provide guidance on the subject of mitigation periods for GHG emissions. Therefore, reference was made to the guidance of the neighboring air district, the South Coast Air Quality Management District (SCAQMD), which supports using a 30-year project life to analyze a project's GHG emissions under CEQA, as more fully explained below.[28]

   SCAQMD generally authorizes the use of a 30-year project life to calculate GHG emission offsets in the CEQA mitigation context for land use development. More specifically, in conjunction with its development of GHG emissions significance thresholds for application in the CEQA context, SCAQMD identified a 30-year project life offset criterion after multiple stakeholder working group meetings. SCAQMD recommended this specific project life because: "… the 30-year life of credits is based on a standard 30-year economic life of a project (equipment, etc.) and the SCAQMD is looking at that time period as a default time period. Other shorter options, such as equipment permitted for a shorter time period, would be considered and evaluated on a project-by-project basis."[29]

   SCAQMD folded this 30-year project life into its recommendation for arriving at GHG emissions reduction measures, stating: "… the lead agency would quantify GHG emissions from the project and the project proponent would implement offsite mitigation (GHG reduction projects) or purchase offsets to reduce GHG emission impacts to less than the proposed screening level. In addition, the project proponent would be required to provide offsets for the life of the project, which is defined as 30 years."[30]

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[26] See CDFW, *Final Additional Environmental Analysis for the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan* (SCH No. 2000011025) (June 2017).

[27] The cited documentation for the referenced AB 900 projects is located at http://www.opr.ca.gov/ceqa/california-jobs.html.

[28] SCAQMD is principally responsible for comprehensive air pollution control in the South Coast Air Basin, which includes portions of Los Angeles, Riverside and San Bernardino counties and all of Orange County.

[29] SCAQMD, Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group Meeting #6 (October 22, 2008), p. 4; see also ICF International Technical Memorandum, Appendix B, Summaries of Working Group Meetings, Figure B-3, Proposed Tiered Decision Tree Approach, at p. B-10 (Jul. 30, 2008) ["Offsets provided for 30-year project life, unless project life limited by permit, lease, or other legally binding conditions."].

[30] SCAQMD, Draft Guidance Document – Interim CEQA GHG Significance Threshold, Attachment E, pp. 3-

In December 2008, SCAQMD's Board adopted the staff-recommended interim GHG significance threshold for stationary source/industrial projects where the air district is the CEQA lead agency; that threshold uses a 30-year project life for modeling purposes and for determining required mitigation. SCAQMD's Board was not asked to take final action on the significance evaluation framework developed by staff for residential and commercial projects, due to the need for further work efforts related to CARB's then-pending interim GHG proposal. However, SCAQMD's documentation does not discriminate between project type (industrial vs. residential/commercial) for purposes of delineating the project life criterion. Instead, like in the industrial/stationary source context, the mitigation offsets criterion for residential/commercial projects also applies to a 30-year project life.

3. A 30-year project life is widely used in CEQA documents by expert consultants and lead agencies—including San Diego County, the local land use agency with jurisdiction over the Project site—for analyzing a project's GHG emissions under CEQA. It is industry practice to amortize construction emissions for residential and commercial projects over a 30-year period, which corresponds to the assumed operational life of such projects. This standard practice is not limited to the County of San Diego, but rather is used by lead agencies and expert consultants across California. Examples include:

    - Certified Final EIR for the Otay Ranch University Villages Project (SCH No. 2013071077; November 2014), Lead Agency: City of Chula Vista, GHG Consultant: Dudek, Global Climate Change Section at pages 5.14-21 and 5.14-24 (available at: http://www.chulavistaca.gov/home/showdocument?id=8453);
    - Draft EIR for the Qualcomm Stadium Reconstruction Project (SCH No. 2015061061; August 2015), Lead Agency: City of San Diego, GHG Consultant: AECOM, Greenhouse Gas Emissions Section at pages 4.5-14, 4.5-16 and 4.5-19 (available at: https://www.sandiego.gov/sites/default/files/legacy/cip/pdf/stadiumeir/chap4.pdf);
    - Certified Final EIR for the 333 La Cienega Boulevard Project (SCH No. 2016011061; September 2016), Lead Agency: City of Los Angeles, GHG Consultant: ESA, Initial Study at pages B-42 to B-43 (available at:http://planning.lacity.org/eir/333LaCienaga/files/Appendix%20A-1%20-%20Part%201%20Initial%20Study.pdf);
    - Initial Study/Mitigated Negative Declaration for the Oakland Airport Perimeter Dike FEMA and Seismic Improvements Project (SCH No. 2015092045; September 2015), Lead Agency: Port of Oakland, GHG Consultant: URS, page 3-40 (available at:http://www.portofoakland.com/files/PDF/environment/Airport_Public_Draft_IS_MND.pdf);
    - Certified Final EIR for The Landing at Walnut Creek Apartments Project (SCH No. 2013092048; May 2014), Lead Agency: City of Walnut Creek, GHG Consultant: The Planning Center l DC&E (PlaceWorks), Greenhouse Gas Emissions Section at pages 4.7-14 and 4.7-15 (available at: http://www.walnut-creek.org/home/showdocument?id=3000); and,

16 (Oct. 2008); see also *id.*, Figure 3-1, p. 3-11 and Table 3-4, pp. 3-18. Also of note, SCAQMD recognized that a shorter project life (i.e., less than 30 years) can be appropriate for use in modeling under certain circumstances. (See id., Figure B-3, pp. B-10.)

- Certified Final Additional Environmental Analysis for the Newhall Ranch RMDP/SCP Project (SCH No. 2000011025, June 2017), Lead Agency: CDFW, GHG Consultants: Ascent Environmental, Inc. and Ramboll Environ, Global Climate Change/Greenhouse Gas Emissions Section at pages 2.1-20 through 2.1-22 (available at: https://www.wildlife.ca.gov/regions/5/newhall).

4. Executive Order (EO) S-3-05 established 2050 as the target year for an 80 percent reduction in statewide GHG emissions below 1990 levels. The regulatory framework needed to achieve this target requires transforming the State's transportation, energy, and industrial sectors. As such, the future GHG emission profiles for these sectors are not generally known. And, modeling emissions significantly beyond 2050 requires speculation about GHG emissions that are not knowable or known.

   Here, the Project's mitigation period under mitigation measure M-GCC-8 is 30 years. Because the mitigation obligation is subject to phased implementation, based on the incremental portion of development associated with each Site Plan and its corresponding building permits, the mitigation period extends beyond 2050 for Site Plans with corresponding building permits that are issued later in the Project's construction schedule. For example, the anticipated build-out year of the project is 2030. If any building permits for implementing Site Plans are issued in 2030, the mitigation period for the associated buildings would extend to 2059.

   Based on information provided above regarding regulatory input and modeling parameter limitations for post-2050 emissions estimates, a 30-year project life (that extends beyond the target year established by the referenced EO) has been established as the period of time for which GHG emissions can be reasonably estimated without undue speculation.

5. The modeling analysis likely overestimates the Project's GHG emissions because the modeling does not take into account reasonably foreseeable regulatory programs and other governmental strategies and technological factors that likely would result in further reductions in GHG emissions levels throughout California that are needed to achieve the State's 2030 and 2050 GHG reduction targets. Those future policies, regulations and programs are not yet adopted and their precise parameters are unknown at this time.[31] Because of these uncertainties, predicting, with quantified precision, key variables and inputs affecting long-range GHG emissions forecasts beyond the 30-year period requires speculation, contrary to CEQA Guidelines Section 15145. The inherent uncertainties are reflected in available GHG emissions modeling tools, which are limited to the integration of existing regulatory and technological standards.

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[31] CARB's *2017 Climate Change Scoping Plan* incorporates the "Cleaner Technology and Fuels Scenario" of CARB's *Mobile Source Strategy* (May 2016), which is based on the assumption that the combined car and light trucks sales of zero emission vehicles and plug-in hybrid electric vehicles will reach 100 percent by 2050. (*Mobile Source Strategy*, p. 36.) On page 65 of the *Mobile Source Strategy*, CARB similarly observes that: "The updated Vision analysis shows the vast majority of the on-road fleet must be ZEVs and PHEVs by 2050 in order to meet GHG targets, requiring sales to achieve nearly 100 percent ZEVs (BEVs, FVCs, and PHEVs combined) by that point." Therefore, CARB, with the contemplated amendment of its Advanced Clean Cars regulation described in the *Mobile Source Strategy*, is striving to ensure that 5.3 million combined ZEVs and PHEVs statewide are on California's roadways in 2050. (*Mobile Source Strategy*, p. 65.)

The referenced "Vision analysis" is based on a multi-pollutant scenario planning tool that quantifies changes in criteria air pollutants (and their pre- cursors), GHG emissions, toxic air contaminants and petroleum usage as various technologies become widespread in vehicle and equipment fleets. (*Mobile Source Strategy*, p. 6.)

In using the 30-year project life, the County recognizes that the residential and non-residential development facilitated by the Project could continue to exist for more than 30 years. During and after the 30-year project life period, the Project would be subject to a range of existing and future regulatory standards and policies applicable to the built environment. Indeed, California is expected to implement numerous additional policies, regulations and programs to reduce statewide emissions to achieve the GHG reduction goals of SB 32 and EO S-3-05. The County has exercised its discretion to determine that a 30-year project life is reasonable and supported by the substantial evidence discussed below.

Also of note, in a decision issued on December 19, 2018 (see *Friends of the Santa Clara River et al. v. County of Los Angeles* [Case No. BS 170568]), the Los Angeles County Superior Court found that a 30-year period for the mitigation of operational GHG emissions via carbon offsets is supported by substantial evidence. The Superior Court cited evidence in the record of proceedings before it concerning reasonable scientific limits; the parameters of available modeling tools; the changing regulatory structure and post-2050 uncertainties; and, the use of the same temporal period by other expert agencies, including CARB and SCAQMD, as well as multiple CEQA lead agencies. The referenced decision is included in Attachment RO6.1 of these Responses to Comments. While the Superior Court's decision in that matter is not citable precedent in a legal context, was appealed and is currently being considered by California's Second District Court of Appeal, Division Five (see Case No. B296547), the petitioners in that case have not challenged the Superior Court's decision relative to any GHG issues, including the 30-year mitigation period. A copy of the subject decision also is included in Attachment GR.R1.1 of these Responses to Comments.

The Fourth District Court of Appeal's decision in *Sierra Club v. County of San Diego* (Case No. D075478) also affirmed the County's use of a 30-year period in the Supplemental EIR's carbon offsets mitigation measure for its Climate Action Plan, explaining that the 30-year period was disclosed and substantiated by cited air district guidance.

In summary, and in accordance with the authority established by CEQA Guidelines Section 15064.4(a)(1), the choice of a 30-year project life is consistent with established modeling frameworks used in CEQA analysis and the available scientific and evidentiary information. Each of these five grounds independently substantiates the 30-year period set forth in mitigation measure M-GHG-3. They provide the substantial evidence needed for the County to develop project-specific methods in accordance with CEQA Guidelines Section 15064.4(a)(1). Given the use and endorsement of a 30-year project life method by multiple experts in the field (i.e., CARB, SCAQMD, the County of San Diego, and other lead agencies and GHG consultants), as well as the speculation required to estimate post-2050 GHG emissions and the embedded conservatism of the Project's GHG emissions inventory data, the 30-year mitigation period is appropriate, reasonable, and supported by substantial evidence.

Scientific Attributes of GHG Emissions and Global Climate Change

While the EIR's recommended mitigation framework includes a locational preference criterion, the County also notes that GHG emissions result in a global, cumulative impact. This has been acknowledged by the California Supreme Court in *Center for Biological Diversity et al. v. California Department of Fish and Wildlife* (2015) 62 Cal.4th 204. In that decision, the Supreme Court stated that:

> "First, because of the global scale of climate change, any project's contribution is unlikely to be significant by itself … With respect to climate change, an individual project's emissions will most likely not have any appreciable impact on the global problem by themselves, but they will contribute to the significant cumulative impact caused by greenhouse gas emissions from other sources around the globe … Second, the global scope of climate change and the fact that carbon dioxide and other greenhouse gases, once

> released into the atmosphere, are not contained in the local area of their emission means that the impacts to be evaluated are also global rather than local."

The County also notes that, unlike criteria pollutants where individual districts are characterized by varying levels of pollutant concentrations and source types, GHGs and their attendant climate change ramifications are a global problem (CAPCOA 2008). Climate change is a global phenomenon in that all GHG emissions generated throughout the earth contribute to it; the action of GHGs is global in nature, rather than local or regional (or even statewide or national) (CAPCOA 2008). Thus, it logically follows that *mitigation* for such impacts also does not depend on – and need not take place – where the GHG is emitted. Indeed, following citation to the California Supreme Court's *Center for Biological Diversity* decision, the Fourth District Court of Appeal's decision in *Sierra Club v. County of San Diego* (Case No. D075478) expressly recognized that, because of the science of global climate change, "reducing or eliminating GHG emissions anywhere is a benefit."

Former Board Supervisor Roberts made this same point during the February 14, 2018 Board hearing regarding the CAP:

> [GHG] is not the same as air quality. Air quality is a localized issue … But fundamentally, [GHG] is different. If I can reduce [GHG] emissions on the North Pole, then just as good for the planet. It doesn't make a difference. I need to be able to verify that I'm actually getting real reductions. Don't know that there's many emissions on the North Pole, so it's probably not a good example, but I keep hearing it's got to be done in San Diego County. The priority should be get it done, period. If we can go to Imperial County and we can develop a [carbon offset] program with people – the farmers in Imperial County, do it. As long as it's verifiable, we can certify, and we can – we know it's sustainable.

(Transcript of February 14, 2018 Board of Supervisors meeting, pages 125-126.)

Accordingly, geographical limits to mitigation options do not align with the science and understanding of GHGs and the global, cumulative nature of GHG emissions. When considered in relation to the state of climate science, one metric ton of GHG emitted in San Diego, California has the same impact on global climate change as one metric ton of GHG emitted in London, England. Likewise, the elimination of one ton of GHG in London (or anywhere else in the world) produces the same mitigation benefit *locally* as the elimination of one ton of GHG in San Diego. As all GHG emissions generated throughout the earth contribute to climate change, a reduction in GHG emissions on earth would offset the generation of GHG emissions and their contribution to climate change regardless of geographic location.

Although the science of global climate change establishes that the geographic location of an offset is not relevant to the effectiveness of the reduction, as updated in EIR Section 2.10, neither mitigation measure M-GCC-7 nor mitigation measure M-GCC-8 permit the Project to use international offsets to reduce its GHG emissions. Instead, the updated "Locational Performance Standards" in those two mitigation measures have been narrowed to prohibit the use of international offsets; the measures exclusively permit the use of in-County, in-State and in-U.S. offsets. Further, based on the County's review of the protocols applicable to carbon offset project types in California and the United States (see M-GCC-7 Attachment "A"), the County has determined that the protocols contain sufficient verification and enforcement avenues for the registries to ensure that the carbon offset project developers comply with each standard's protocols. If compliance is not demonstrated, based on each registry's evaluation and as informed by the independent third party's verification report and statement, then the registry will not issue carbon offsets for retirement.

Implementation of Feasible Project Design Features Prior to Reliance on Carbon Offsets

Some comments state that the proposed Project should include additional project design features and incorporate other mitigation measures before relying on the purchase of carbon offsets to reduce GHG emissions. The County does not concur for the following reasons.

To begin, CEQA provides lead agencies with discretion to formulate feasible mitigation measures for the reduction of GHG emissions. Specifically, CEQA Guidelines Section 15126.4(c) addresses the mitigation of GHG emissions and provides a non-exclusive list of potentially feasible mitigation concepts for consideration by lead agencies and project proponents. CEQA Guidelines Section 15126.4(c) does not establish a hierarchy of allowable mitigation options – there are no limits imposed on the geographic or locational attributes of the mitigation options, and there is no imperative to secure additional on-site reductions before utilizing carbon offsets.

As background, CEQA Guidelines Section 15126.4(c) was adopted by CNRA at the conclusion of the rulemaking processes mandated by SB 97 (Dutton, 2007; see also Pub. Resources Code, §21083.05) and became effective in March 2010. On page 50 of the CNRA's *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97* (December 2009), CNRA expressly rejected invitations to establish any sort of mitigation hierarchy for GHG emissions in CEQA Guidelines Section 15126.4(c):

> "Several comments, for example, suggested that the Guidelines provide a specific 'hierarchy' of mitigation requiring lead agencies to mitigate GHG emissions on-site where possible, and to allow consideration and use of off-site mitigation only if on-site mitigation is impossible or insufficient. OPR and the Resources Agency recognize that there may be circumstances in which requiring on-site mitigation may result in various co-benefits for the project and local community, and that monitoring the implementation of such measures may be easier. However, CEQA leaves the determination of the precise method of mitigation to the discretion of lead agencies."

When discussing how local governments can support climate action through CEQA, on page 102 of *California's 2017 Climate Change Scoping Plan* (November 2017), CARB "recommends that lead agencies prioritize on-site design features that reduce emissions, especially from VMT, and direct investments in GHG reductions within the project's region that contribute potential air quality, health, and economic co-benefits locally." On that same page, CARB recognizes that "[w]here further project design or regional investments are infeasible or not proven to be effective," it also "may be appropriate and feasible to mitigate project emissions through purchasing and retiring carbon credits." As such, much like the framework established in CEQA Guidelines Section 15126.4(c), CARB recognizes the utilization of a portfolio-based approach in the development and selection of feasible mitigation measures for the reduction of GHG emissions, while simultaneously recommending the prioritization of GHG emissions-reducing strategies in a project's vicinity due to the corresponding economic and air quality co-benefits. Consistent with this, as discussed above, CARB does not mandate that AB 900 projects limit their utilization of offsets to those that have a local origin.

Here, the proposed Project would utilize a portfolio-based approach that includes on-site EDCs and on-site mitigation measures to reduce Project emissions by approximately 15 percent and, to achieve net zero emissions, carbon offsets. The on-site EDCs and on-site mitigation measures considered in Section 2.10, Global Climate Change, of the 2019 Recirculated Portions of the Draft EIR include:

- An EDC to prohibit wood-burning fireplaces and only permit natural gas fireplaces;

- An EDC to provide curbside recycling in residential and non-residential development areas;
- An EDC to implement the Water Conservation Plan, which would reduce outdoor water usage by 30 percent when compared to existing outdoor water usage for typical residential homes;
- Transportation Demand Management (TDM) strategies (M-GCC-1);
- Beyond code, high-efficiency lighting in multi-family homes and non-residential buildings (M-GCC-2);
- EnergyStar appliances in multi-family homes and non-residential buildings (M-GCC-3);
- Zero Net Energy single-family residences (M-GCC-4);
- Beyond code building design efficiencies in multi-family homes and non-residential buildings (M-GCC-5); and,
- Zero emission vehicle charging infrastructure in residential and non-residential areas (M-GCC-6).

The EIR conservatively accounts only for GHG emission reductions that are readily quantifiable, even though all EDCs and mitigation measures – whether or not strictly quantifiable – are required. Thus, it is notable that the EIR likely underestimates the amount of GHG emissions reductions achieved by the Project with its internal, on-site GHG-reducing strategies.

In summary, this approach to GHG reduction and mitigation strategies results in net zero GHG emissions through enforceable tiers of reduction strategies. The Project firstly would implement feasible EDCs and mitigation measures to avoid GHG emissions on-site, along with transportation features to reduce vehicle-related emissions. However, it is not possible or feasible to reduce GHG emissions to net zero using exclusively on-site reduction strategies. The proposed Project – like all residential development – necessarily results in carbon emissions associated with construction activities and the existence of future residents. On-site design features can *minimize* these associated GHG emissions through built-in energy efficiencies and designs that shift transportation decisions, but these designs cannot reduce construction emissions and each future residence's carbon footprint to zero. Carbon offsets are, therefore, a critical tool to create offsetting reductions off-site where various factors otherwise prevent reduction activities.

Accordingly, to reduce GHG emissions to net zero, mitigation measures M-GCC-7 and M-GCC-8 would require the Project to purchase carbon offsets reducing emissions to net zero. As discussed above, carbon offsets are effective wherever the offset project is located because the environmental consequence of GHG emissions is not localized. Nevertheless, the mitigation measures impose locational prioritization standards. Under M-GCC-7 and M-GCC-8, the locational standards would be implemented and enforced at the implementation stage because it is not practical to pre-determine the availability of offsets from each location; offset projects are being continuously developed and may arise between Project approval and implementation. Further, while these locational standards are not scientifically necessary to the effectiveness of the mitigation and are not otherwise mandated, the EIR recommends them and they help support local offset projects to the extent they are feasible and available. This strategy to mandate offsets from expanding locations in tiers ensures that *all* feasible measures are used to satisfy the proposed Project's commitment to net zero.

<u>The Use of Carbon Offsets Is Not Inconsistent with the County's General Plan</u>

Commenters have questioned whether the proposed Project's use of carbon offsets that are not associated with San Diego County-based, offsets-generating projects is consistent with the County's General Plan, and specifically Goal COS-20 and Policy COS-20.1 therein. However, as provided below (and as discussed in **Appendix E-1** of this EIR, which contains a tabular assessment of the Project's consistency with the

General Plan), the proposed Project's mitigation framework is consistent with the General Plan because it reduces Project-related GHG emissions beyond a level necessary to align with the statewide reduction targets established by AB 32 and SB 32.

As background, the subject Goal and Policy are set forth below, with underline/strikeout text used to illustrate the modifications to the subject text made by the County in concert with its February 2018 adoption of its Climate Action Plan (see Global Response: County of San Diego Climate Action Plan).

Goal COS-20 (Governance and Administration)

> Reduction of ~~local~~ community-wide (i.e., unincorporated County) and County Operations ~~GHG~~ greenhouse gas emissions contributing to climate change that meet or exceed requirements of the Global Warming Solutions Act of 2006, as amended by Senate Bill 32 (as amended, Pavley. California Global Warming Solutions Act of 2006: emissions limit).

Policy COS-20.1 (Climate ~~Change~~ Action Plan)

> Prepare, maintain, and implement a ~~climate change action plan with a baseline inventory of GHG emissions from all sources; GHG emissions reduction targets and deadlines, and environmental GHG emissions reduction measures.~~ Climate Action Plan for the reduction of community-wide (i.e., unincorporated County) and County Operations greenhouse gas emissions consistent with the California Environmental Quality Act (CEQA) Guidelines Section 15183.5.

As to Goal COS-20, the Goal envisions a reduction of GHG emissions associated with activities within the County's control (community-wide activities and County operations). The Goal does not specify how reductions must occur, prohibit certain types of reduction strategies, or mandate project-specific reduction requirements. For the reasons discussed above, and below, an offset is an effective method to reduce GHG emissions contributing to global climate change.

Instead of placing limits on GHG reduction tools, Goal COS-20 and Policy COS-20.1 more plainly express the County's commitment to reduce GHG from emissions-generating activities under the County's jurisdiction (i.e., those activities located in the unincorporated areas and those activities associated with County government operations). Goal COS-20 and Policy COS-20.1 also express the County's commitment to reduce emissions at a level that meets or exceeds the requirements of the Global Warming Solutions Act (AB 32), as amended by SB 32, which, together, establish statewide GHG reduction targets for 2020 and 2030.

Significantly, Goal COS-20 is expressly linked to the operative legislation for the establishment of statewide GHG reduction targets – AB 32 and SB 32.[32] The County purposefully linked its Goal to this legislation to ensure it would have all tools available from the State to reduce GHG emissions. One such tool is the use of offsets. Consistent with the referenced legislation, numerous State laws and policies support the use of out-of-County offsets, examples of which are summarized in abbreviated form below:

- CEQA Guidelines section 15126.4(c), developed in concert by the California Natural Resources Agency and Governor's Office of Planning and Research, allows for the use of offsets to mitigate

[32] Policy COS-20.1 is intended to "assist the County as it makes decisions relating to each goal and indicates a commitment by the County to a particular course of action." (General Plan, page 1-5.) As such, like Goal COS-20, Policy COS-20.1 should be interpreted and implemented via reference to the cited legislation.

GHG and imposes no geographic hierarchy or restrictions on available GHG mitigation tools.

- CARB most recently recommended the use of offsets as a potentially feasible mitigation measure for project-level CEQA analysis in Appendix B of its 2017 Scoping Plan, which was developed and approved by CARB in furtherance of attaining SB 32's 2030 statewide reduction target. While CARB expressed a preference for in-State reduction opportunities, CARB – the State agency responsible for California's climate change laws and policies – does not impose hardline geographic limitations on the tools and methods for reducing GHG emissions.
- CARB has determined that AB 900 projects (which are designated "environmental leadership development projects" under CEQA and subject to judicial streamlining (see Pub. Resources Code, §§21178-21189.3)) can achieve the statutorily-mandated no net increase GHG level through the purchase of offsets without imposing rigid, quantitative limits on the locational attributes of such offsets. While more recent AB 900 projects have committed to a preference for local reduction opportunities (using verbiage similar to that used by the County), no quantitative mandates are associated with that preference and the ultimate portfolio of procured carbon offset credits is subject only to feasibility principles. (See EIR **Appendix C-26**, *Survey of Local Performance Standards Used by AB 900 Projects*, for additional details on CARB's standards.)
- AB 32 and SB 32, as codified in the Health & Safety Code (see, e.g., Health & Saf. Code, §38505(k)), specifically support the use of market-based compliance mechanisms, such as transactions in offsets. As such, in promulgating its Cap-and-Trade Program for stationary sources under AB 32, CARB allows regulated entities (which typically are large stationary source emitters, like fuel refineries) to achieve a portion of their GHG reductions through the use of non-local offsets. The compliance offsets issued by CARB under the Cap-and-Trade Program are located throughout the United States, as illustrated by CARB's issuance map.[33]
- The California Department of Fish and Wildlife, with the support of CARB, approved the Newhall Ranch project, which relies on non-local GHG reduction opportunities to achieve net zero GHG emissions from a large-scale (more than 20,000 residential units and 9 million square feet of nonresidential development) planned community.

The interpretation of the General Plan offered by some commenters is unsupported by a plain reading of the Goal, is not consistent with the intent of the County (including its Board of Supervisors) when developing and adopting the Goal and is not scientifically supportable given the global nature and implications of climate change. If the County had intended to mandate only local reductions be used as CEQA mitigation measures, the Goal would have mentioned CEQA and read: "Local reduction of …;" but, it does not.

Particularly in the scientific realm of global climate change, such an interpretation of the Goal is over-broad and unsupported. In fact, both COS-20 and the 2011 GPU EIR mitigation specifically refer to AB 32, the Global Warming Solutions Act, and global warming in general (2011 GPU EIR pages S-20, 2.17-1 et seq., and 7-80; 2011 GPU pages 5-31-33, 38). Further, GHG emissions are a global, cumulative impact, as discussed above.

[33] CARB's compliance offsets issuance map is available at https://webmaps.arb.ca.gov/ARBOCIssuanceMap/ and depicts the location of carbon offset projects administered pursuant to the CARB-approved regulatory protocols for the Cap-and-Trade Program.

An interpretation of Goal COS-20 that requires exclusively local reductions also is not consistent with CARB's *California's 2017 Climate Change Scoping Plan* (which recognizes and affirms the use of nonlocal reduction opportunities) or its review of AB 900 projects (which have not been conditioned to mandate the exclusive use of local reductions), the Cap-and-Trade Program (which allows regulated entities to achieve a portion of their GHG reductions through the use of non-local offsets), the California Department of Fish and Wildlife's approval of the Newhall Ranch project (which also relies on non-local GHG reduction opportunities to achieve net zero GHG emissions), and the policy principles of the Kyoto Protocol (which encourage the investment of GHG reduction programs in developing nations).

The Goal must also be read in the context of the policies that guide its implementation. As background, the relationship between Goals, Policies, and Implementation Measures is described in the County of San Diego General Plan on pages I-5 and I-6:

- Goals describe ideal future conditions for a particular topic, such as town centers, rural character, protection of environmental resources, traffic congestion, or sustainability. Goals tend to be very general and broad.
- Policies provide guidance to assist the County as it makes decisions relating to each goal and indicates a commitment by the County to a particular course of action. The policy is carried out by implementation measures. While every effort has been made to provide clear and unambiguous policies, the need for interpretation will inevitably arise. The authority of interpretation lies with the County and will be enacted through its implementation measures and decisions. Therefore, the Implementation Plan should be reviewed for a complete understanding of each policy.
- Implementation Measures, adopted by the County in a separate Implementation Plan, identify all the specific steps to be taken by the County to implement the policies. They may include revisions of current codes and ordinances, adoption of plans and capital improvement programs, financing actions, and other measures that will be assigned to different County departments after the General Plan is adopted.

The General Plan's policies, operating as policy guidance, guide the County's policy efforts to achieve the ideal future conditions envisioned in the goal. These policies frame the intent and vision for implementation of a goal. For Goal COS-20, the General Plan does not set forth policies envisioning direct application to individual projects, but rather policies envisioning changes to County operations and the creation of applicable plans: Policy COS-20.1 directs the County to implement a Climate Action Plan; Policy 20.2 directs the County to establish and maintain a program to monitor GHG emissions from various sources for a review of effective GHG-reducing strategies; COS-20.3 directs the County to coordinate with other jurisdictions; and COS-20.4 directs the County to provide education and assistance on the importance and approaches for reductions to GHG emissions.

These Policies are not applicable to individual projects (like the proposed Project). As to Policy COS-20.1, it pertains to a jurisdictional responsibility of the County of San Diego and applies to the County's development of a Climate Action Plan. For the reasons set forth in Global Response: County of San Diego Climate Action Plan, the proposed Project does not use, tier from, or rely on, the County's 2018 Climate Action Plan (or its mitigation), which is the subject of pending litigation. Regardless, CEQA Guidelines Section 15064.4 does not require that the County use a climate action plan to evaluate the environmental significance of a project. Rather than rely on consistency with a climate action plan as a significance criteria, the analysis presented here conservatively treats any increase in GHG emissions as a cumulatively considerable impact of the proposed Project, which is supported by the 2017 Scoping Plan. The proposed Project is required to implement all feasible mitigation to reduce the impact to less than significant. As discussed above, offsets are a feasible mitigation measure and therefore the County must require the Project to purchase offsets under CEQA.

Subsequent to adoption of the County's General Plan in 2011, and since 2013, the County has permitted land use development projects to offset their GHG emissions by purchasing offsets.[34] This practice was followed when the Board approved the Soitec solar project (an AB 900 project) in February 2015; the Park Circle, Sweetwater Place, and Sweetwater Vistas projects in the fall of 2017; and the Lake Jennings Marketplace project in January 2018. These were not ad hoc decisions or applications of an unarticulated policy. Rather, these project approvals demonstrate that the Board has consistently interpreted Goal COS-20 and Policy COS-20.1, in their original form, to allow out-of-County offsets and intended that such offsets be included in the array of GHG reduction tools available to the County.

In *Sierra Club v. County of San Diego* (Case No. D075478), the Fourth District Court of Appeal held that the Climate Action Plan was "not inconsistent" with the County's General Plan. In reaching its holding, the Fourth District considered the plain text of relevant General Plan goals and policies, the Climate Action Plan's framework for in-County reductions, and the science of global climate change (as discussed above). Much like the Climate Action Plan's approach, the Project first utilizes on-site, in-County reduction strategies to mitigate construction and operational GHG emissions and secondarily pivots to off-site reduction strategies in the form of carbon offsets in order to achieve the net zero reduction target. The Project's mitigation framework does not prohibit the use of registry-issued carbon offsets resulting from off-site, in-County carbon offset projects– to the contrary, the mitigation measure would require their use, if available at the time of need.

In any case, even if Goal COS-20 is erroneously interpreted as requiring reductions through local measures only, the Project is consistent with the goal. As discussed above, the Project incorporates all feasible on-site measures to reduce GHG emissions. After exhausting feasible on-site measures, the Project would have GHG emissions that would be required to be offset. Mitigation measures M-GCC-7 and M-GCC-8 require that the County and Project follow and enforce a geographic priority system with respect to the purchase of carbon offsets, with the highest level of priority afforded to local offsets. As discussed above, this priority system is enforced at the implementation stage based on the availability of offsets at that time. These measures require the Project to exhaust all feasible and available offset opportunities from the higher priority geographic category before utilizing offsets from the next category.

Thus, while this priority system is Project-specific and not otherwise mandatory, it is consistent with the preferences expressed by some commenters to maximize localized reductions and local offsets. Further, given that an infeasibility determination is necessary to utilize offsets from a lower locational priority, the Project's use of a lower locational priority beneficially replaces a determination that further mitigation is infeasible.

In the context of global climate change, this structure provides the necessary hardline goal and policy flexibility necessary to address the multi-faceted and inter-related tools to reduce overall GHG emissions. Project-level consistency must accordingly be measured by the project's consistency with the County's plans and operations as directed through General Plan Policies COS-20.1 through 20.4.

[34] The County's 2013 *Guidelines for Determining Significance and Report Format and Content Requirements for Climate Change* ("Climate Change Guidelines") which expressly allowed offsets as mitigation for GHG impacts and identified a number of County-sanctioned offset registries, all of which offer out-of-County, out-of-state, and international offsets. Although the 2013 Climate Change Guidelines were later set aside as part of the 2012 CAP litigation, they nevertheless demonstrate that the County, since at least 2013, intended to include out-of-County offsets as one of the mitigation tools available to reduce GHG emissions within the County's jurisdiction.