

3.1.6 Organizations

01. Letter from Apartment America, dated February 13, 2017

Comment No. 01-1:

Attached, please find our letter regarding the Newhall Ranch EIR to be included in the record.

Response No. 01-1:

This comment introduces the attached comment letter. The comments set forth in the attached letter are addressed below (see Comment Nos. 01-2 through 01-5 and their corresponding responses). This comment is noted for the record and is included in this Final AEA for review and consideration by the decision-makers.

Comment No. 01-2:

I am writing on behalf of the Apartment Association of Greater Los Angeles to give our support to the Newhall Ranch project. Not only is it environmentally friendly, as it will result in no net emissions of greenhouse gases from the development or operation of the master-planned community, it is also fulfill [sic] a desperate need for supply to the housing market.

According to a recent study done by Next 10, “from 2005 to 2015, permits for only 21.5 housing units were filed for every new 100 residents in California, less than any other state except Alaska.” There is not enough housing in California to meet the demand, plain and simple. Additionally, this community will spur the development of some 60,000 jobs which are sorely needed.

The only way we can reduce the housing crisis in the state is by supporting good, smart and sustainable development. This project passes the test with flying colors and is a no brainer.

Response No. 01-2:

This comment serves as an introduction to Letter No. 01 and expresses support for the development proposed for the Newhall Ranch Specific Plan site, which is located within the RMDP/SCP project area. The comment also expresses specific support for the programs to achieve net zero GHG emissions, as well as the employment generation and new housing resulting from the development associated with the project. This comment is noted for the record and is included in this Final AEA for review and consideration by the decision-makers.

Comment No. 01-3:

As you may know, the Apartment Association of Greater Los Angeles (AAGLA) is an organization that provides industry leadership and member services to over 20,000 rental property owners and managers throughout the L.A. basin. Our members provide affordable housing for hundreds of thousands of residents in Southern California and represents over \$50 billion in property assets.

Response No. 01-3:

This comment provides information regarding the organization that authored Letter No. 01. No further response is required.

Comment No. 01-4:

We strongly support this project to help bring economic, environmental and housing relief.

Response No. 01-4:

This comment expresses support for the project. The comment also expresses specific support for the economic, environmental, and housing relief resulting from the development associated with the project. This comment is noted for the record and is included in this Final AEA for review and consideration by the decision-makers.

Comment No. 01-5:

Please do not hesitate to call me with any questions.

Response No. 01-5:

This comment indicates to call with any questions. This comment is noted for the record and is included in this Final AEA for review and consideration by the decision-makers.

02. Letter from the California State Polytechnic University, Pomona, dated February 13, 2017

Comment No. 02-1:

Betty-Can you send me a reply so I know that you got this.

Response No. 02-1:

CDFW acknowledges receipt the e-mail from Jonathan N. Baskin, Ph.D., dated February 13, 2017. The comments set forth in the attached letter are addressed below (see Comment Nos. 02-2 through 02-5 and their corresponding responses). This comment is noted for the record and is included in this Final AEA for review and consideration by the decision-makers.

Comment No. 02-2:

I have examined the Draft AEA and have only two important comment.

Response No. 02-2:

This comment is an introduction to the comments that follow. No further response is required.

Comment No. 02-3:

One is that the unarmored threespine stickleback, *Gasterosteus aculeatus williamsoni*, a state and federal endangered Species, cannot survive long term in concrete or rip-warp lined stream channels. This is the case because during a high flow events, such as we are now experiencing, or any bank to bank flows, the fish will have no place of refuge and be washed out of the system. Thus the Santa Clara River in the area of this development described in the Draft AEA will not be able to support this Endangered fish.

Response No. 02-3:

The comment states that the unarmored threespine stickleback, a state and federal endangered species and a California fully-protected species, “cannot survive long term in concrete or rip-warp [sic] lined stream channels.” The explanation provided in the comment is that during high-flow events or any bank-to-bank flows, the unarmored threespine stickleback “will have no place of refuge and will be washed out of the system,” and, thus, “will not be able to support this Endangered fish” with regard to the development described in the Draft AEA. CDFW does not concur with this statement.

First, in the project development condition, the Santa Clara River reach within the project site will not consist of a concrete or rip-rap-lined stream channel. Instead, as described in the 2010 Final EIR, the River Corridor Special Management Area (SMA) is generally 1,500 to 2,000 feet wide and located along the north and south sides of the Santa Clara River. (2010 Final EIR, Section 2.0, Project Description, p. 2.0-52.) The approximately 975-acre River Corridor SMA includes preservation areas along the Santa Clara River within the Specific Plan site. The value of the River Corridor SMA is derived from its wetland and riparian habitats, and from its function as a regional wildlife corridor. The Specific Plan’s River Corridor SMA also comprises a portion of Los Angeles County’s Significant Ecological Area 23 (SEA 23), another reason for its protection and dedication as open space within the project site. While the Santa Clara River generally would remain in its natural condition (even with development), the RMDP proposes bridge crossings and primarily buried bank stabilization – there are no plans to install a concrete or rip-rap-lined stream channel. (see 2010 Final EIR, Section 2.0, Project Description, pp. 2.0-82 through 2.0-86 [including Figure 2.0-25, Location of Proposed RMDP Santa Clara River Major Features].)

In addition, the majority of the bank protection is located outside of or adjacent to the existing riparian edge of the River Corridor/SMA. This placement substantially decreases the likelihood that river scour (from storm events) would remove the buried soil and vegetation placed over the soil cement bank protection. (see 2010 Final EIR, Section 2.0, Project Description, p. 2.0-85.)

Second, as described in the Draft AEA, the Santa Clara River is a dynamic system, particularly in or after storm events. For example, the Draft AEA states:

Unarmored threespine stickleback in the Santa Clara River favor littoral, backwater habitats; thus, after storm events, the expectation is that they will swim or passively float out with the retreating tide and resume their normal positions in the standard margins of the river where flow rates are 2 fps or less. This behavior has been observed during dewatering efforts in rivers (e.g., Carmel River, Santa Clara River) (ICF International 2016a). At the locations with the deepest residual scour pools (center channel), the velocity during the storm events are expected to be well in excess of 2 fps. Unarmored threespine stickleback would avoid these areas, as the water is moving too fast and the scour pools provide no refuge from the flood or storm flows. Where residual scour pools are minimal in depth or non-existent (e.g., the bridge pier rows at floodplain margins), the flow velocities may be in the range preferred by stickleback (i.e., less than 2 fps). Such areas would be indistinguishable from the numerous other side channels, depressions, and scour holes present throughout the Santa Clara River's natural riverbed habitat, particularly after a reset event. As with any natural depression in this size range, stickleback at a shallow bridge pier scour pool would be expected to follow their natural life history by pursuing the receding flood flows to slow-moving marginal waters along the wetted channel of the river.

The Santa Clara River is dynamic and subject to flashy flows. Following large storm events, the river is characterized by braided channels and denuded riverbed conditions, where most of the vegetation cover, especially emergent vegetation along the margins of the river channel, has been uprooted and swept downstream. It is evident that stickleback have adapted to this type of periodic disturbance. Furthermore, there are no published studies indicating that stickleback, or other small fish with a similar life history, become routinely stranded during storm induced flood flows.

(Draft AEA, Section 3.0, Unarmored Threespine Stickleback, p. 3-29.)

Comment No. 02-4:

My other comment is that the Draft AEA states that stickleback will be captured and relocated to avoid harming them. During the fish's breeding season, which can go on from Spring till early Fall, there is the potential for numerous of newly hatched young to be present. They are extremely sensitive to handling, especially during hot weather, so cannot be netted and captured without significant mortality.

Response No. 02-4:

The comment asserts the Draft AEA "states that stickleback will be captured and relocated to avoid harming them." CDFW does not concur with this statement. To the contrary, the fundamental purpose of the proposed construction modifications to the project's bridges and bank stabilization is to avoid all construction-related contact with the wetted portion of the Santa Clara River channel – to obviate the need for the previously adopted Mitigation Measures BIO-44 and BIO-46 (which called for stream diversion and the collection of stranded fish and their relocation by U. S. Fish and Wildlife Service [USFWS] personnel). To accomplish this, the project proposes to modify the construction methods for the bridges and bank stabilization to avoid construction work in the wetted channel and thereby eliminate the need for stream diversion, collection, and relocation of unarmored threespine stickleback, and Mitigation Measures BIO-44 and BIO-46.

The proposed modified construction methods do not change the location, size, or proposed use of the bridges or bank stabilization features. Rather, the modified design relocates the bridge piers farther from the lower flow channel and changes the construction methods to adjust the timing and construction techniques, so that no work takes place in the wetted channel of the Santa Clara River where unarmored threespine stickleback might be affected. (Draft AEA, Section 3.0, Unarmored Threespine Stickleback, pp. 3-12 through 3-13.)

In short, there will be no handling, netting, or capturing of unarmored threespine stickleback because of the project applicant's proposed construction modification methods with regard to installation of the bridges and bank stabilization features. This conclusion is substantiated in the Draft AEA, Appendix 4, pages 8-9:

The "No Water Contact" construction and maintenance approach is feasible and appears to be a reasonable construction alternative to eliminate the previous mitigation measures (i.e., BIO-44 and BIO-46) that would involve diverting the flow of the river and relocating unarmored threespine stickleback. The project proponent and applicant proposes to avoid take and any possession of unarmored threespine stickleback by timing construction activities in the late summer when Santa Clara River flows are at their lowest and by utilizing construction methods that would avoid all contact with the wetted channel where unarmored threespine stickleback may occur. The available hydrologic, engineering, and geomorphological studies appear to adequately inform the project of expected river behavior, streamflow and inundation widths, and effects of scour that address potential impacts and design considerations that will be implemented to avoid take and possession of unarmored threespine stickleback and other fishes. The proposed construction methods (e.g., CIDH pile and vibratory HP pile installation) appear feasible for avoiding impact to the wetted channel. Monitoring for impacts during construction will help assure take avoidance for the stickleback.

...

Lastly, it is important to acknowledge that the geomorphologic and hydrologic behavior of the Santa Clara River renders it susceptible to abrupt changes in the planform geometry (i.e., channel shifting/migration) if subjected to large winter flow events that result in substantial bed mobilization (i.e., a reset event). Bed mobilizing events may occur in as little as a 10-year storm event. This behavior has the potential to disrupt or delay construction if the low-flow channel (i.e., summer wetted channel) adjusts its position to flow through a proposed pier location. The available studies indicate that the occurrence of a reset event likely would not invalidate the "No Water Contact" approach, because the low-flow channel should be similar in character to the existing low-flow channel, although its alignment may be different. Thus, the technical studies indicate that design considerations, such as the 165-foot spacing of permanent bridge piers, would remain valid; however, it may be necessary to move pier locations.

Comment No. O2-5:

Thank you for allowing me to comment on this document.

Response No. O2-5:

This comment provides a conclusion to comments raised above. No further response is required.

03. Letter from Building Industry Association of Southern California, dated February 10, 2017

Comment No. 03-1:

Ms. Courtney, please accept these prepared comments regarding the Net Zero Newhall Project.

Response No. 03-1:

This comment introduces the attached comment letter. The comments set forth in the attached letter are addressed below (see Comment Nos. 03-2 through 03-5 and their corresponding responses). This comment is noted for the record and is included in this Final AEA for review and consideration by the decision-makers.

Comment No. 03-2:

On behalf of the Building Industry Association of Southern California, BIASC Inc., I am writing to express our support for the tremendous effort that FivePoint has put into the Net Zero Newhall project in achieving a Zero Net Energy master planned community at Newhall Ranch.

Response No. 03-2:

This comment expresses support for the development proposed for the Newhall Ranch Specific Plan site, which is located within the RMDP/SCP project area. The comment also expresses specific support for the Net Zero Newhall and its programs to achieve net zero GHG emissions. This comment is noted for the record and is included in this Final EIR for review and consideration by the decision-makers.

Comment No. 03-3:

BIASC is a regional trade association that represents more than 1,100 member companies within a six-] county region and is comprised of Chapters in Orange, Los Angeles/Ventura, Riverside/Imperial and San Bernardino counties. Together, BIASC's members build most of the new home communities throughout the same six-county region.

Response No. 03-3:

This comment provides information regarding the organization that authored Letter No. 03. No further response is required.

Comment No. 03-4:

According to the Southern California Association of Governments, as documented in the adopted 2016 Regional Transportation Plan and Sustainable Communities Strategy RTP/SCS, Southern California's population is expected to grow from 39M to 50M by 2050. Today, our region is already faced with an extreme shortfall of housing for our current population. Indeed, the recent Statewide Housing Assessment released by the State of California Department of Housing & Community Development indicates that we are short by over 100,00 units annually, with 180,000 per year needed between 2015- 2025 to meet current minimum demand.

One third of renters in the State are paying more than 50% of their income toward housing costs and overall ownership levels are at the lowest since the 1940's. The Assessment goes on to indicate that the housing shortage results in a negative economic impact of \$238 billion, reducing our GDP by 6%. These facts not only hurt the business community and overall employment in the Region, they generate significant consequences in terms of public health, poverty rates, and long distance commutes for people to find attainable housing.

Response No. 03-4:

The comment discusses the growth forecasted to occur in Southern California, the need for additional housing to support the forecasted population growth, and how housing costs and housing ownership levels

adversely affect people. Implementation of the project would address several of these issues through providing additional and affordable housing, employment opportunities, and new commercial land uses near the Valencia Commerce Center. Vehicle trips and vehicle miles traveled (VMT) would be reduced due to the proximity of project-related employment centers to the on-site residential areas and the interconnection of these uses via the extensive network of bicycle and pedestrian trails that would be developed under the project, which would provide connections to the overall Newhall Ranch villages trail to the existing and planned regional trail systems within the Santa Clarita Valley. The project's transportation demand management (TDM) program would also substantively reduce vehicle trips and VMT. Further, the project would be integrated with the Santa Clarita transit system by including bus stops and a mobility hub to discourage use of single-occupancy vehicular travel. The project would also facilitate alternative transportation modes within the Newhall Ranch Specific Plan site via a network of Complete Streets implemented in accordance with the Complete Streets Act of 2008 (Assembly Bill [AB] 1358), as applicable.

Comment No. 03-5:

We provide this information as background context for consideration of the proposed Net Zero Newhall. The full community plan will create 21,500 additional homes in Los Angeles County, our State's largest population center, which is severely underserved for new housing. It will also generate over 60,000 permanent jobs in the Region.

Equally notable, this proposed sustainable community will create 10,000 acres of permanent open space and 50 miles of new public trails. In addition, FivePoint has voluntarily and uniquely proposed a plan that exceeds California's rigorous Title 24 and Cal Green Code requirements for energy conservation. While we applaud FivePoint's leadership in this arena, the reality is that there are construction cost impacts from such an ambitious sustainability plan. As an industry, we remain deeply concerned about the regulatory cost burden impact upon housing affordability in our Region.

The Net Zero Newhall project is unique due to several re-enforcing factors making it perfect for Net Zero attainment including; the existence of a single owner and it is comprised of a large swath of contiguous land uniquely situated. These unique attributes among others also makes replication of this project difficult if not impossible in other locations, simply put, one size does not fit all.

BIASC strongly supports the approval and build out of this innovative and collaborative project as an example of what can be achieved when the dynamics of market innovation and collaboration combine with appropriate project scale, allowing a project like Net Zero Newhall to come to fruition.

Response No. 03-5:

The comment expresses support for the development proposed for the Newhall Ranch Specific Plan site, which is located within the RMDP/SCP project area. The comment also expresses specific support for the Net Zero Newhall proposal and its programs as well as the new housing, employment generation, the preservation of open space, and the new public trails resulting from development associated with the project. This comment is noted for the record and is included in this Final AEA for review and consideration by the decision-makers.

04. Letter from Building Industry Association of California, Los Angeles/Ventura Chapter, dated February 6, 2017

Comment No. 04-1:

Please see the attached letter regarding the Newhall Ranch Draft AEA

Response No. 04-1:

This comment introduces the attached comment letter. The comments set forth in the attached letter are addressed below (see Comment Nos. 04-2 and 04-3 and their corresponding responses). This comment is noted for the record and is included in this Final AEA for review and consideration by the decision-makers.

Comment No. 04-2:

The Los Angeles-Ventura Chapter of the Building Industry Association of Southern California, Inc. (BIA-LAV) is the voice of building and development in Los Angeles and Ventura counties. We represent the thousands of men and women and their member companies who design, plan, build, and remodel homes, condominiums, and apartments throughout our region.

Response No. 04-2:

This comment provides information regarding the organization that authored Letter No. 04. No further response is required.

Comment No. 04-3:

Landmark Village, Mission Village and the entirety of the Newhall Ranch master planned community are significant undertakings that have the unique opportunity to help this region and provide major opportunity for our growing population. Thoughtful planning of the community's streets and infrastructure, schools, library, fire stations, etc. will create a well-balanced environment. As the planners of the Valencia master plan, FivePoint has the needed expertise and dedication to build one of the most innovative projects in history.

Most importantly, we are in a housing crisis. There is a lack of inventory here in Santa Clarita which is exhausting affordability and limiting move-up buyer opportunities. At full buildout, the Newhall Ranch communities will not only create much needed jobs but also create an array of housing types with various price points, expanding home ownership opportunities.

Lastly, the Building Industry Association of Southern California, Los Angeles/Ventura Chapter supports this project. Landmark Village, Mission Village and the entire Newhall Ranch community will provide incredible economic opportunities for the region and help even more people live the American Dream.

Response No. 04-3:

The comment expresses support for the development proposed for the Newhall Ranch Specific Plan site, which is located within the RMDP/SCP project area. The comment also expresses specific support for the development of roads, schools, libraries, fire stations, and new housing, including affordable housing, resulting from the development associated with the project. This comment is noted for the record and is included in this Final AEA for review and consideration by the decision-makers.

05. Letter from California Chamber of Commerce, dated February 13, 2017

Comment No. 05-1:

Attached is our comment letter regarding Newhall Ranch. If you would like to discuss these comments further, please do not hesitate to contact me. Thank you.

Response No. 05-1:

This comment introduces the attached comment letter, which is addressed in the following comment and response, and indicates to contact the author of the letter to discuss these comments. This comment is noted for the record and is included in this Final AEA for review and consideration by the decision-makers.

Comment No. 05-2:

The California Chamber of Commerce (Chamber) respectfully submits the following letter in support of approval of the Draft Additional Environmental Analysis (AEA) for the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (RMDP/SCP) Final Environmental Impact Report (EIR) (SCH No. 2000011025).

While the Chamber does not express an opinion as to any specific element of the EIR, it believes the proposed project furthers California's policies and priorities relating to, among others, housing and job creation. It would supply up to 21,500 homes to meet the demands of California's residents, assisting to alleviate the State's housing crisis. It would further add more than 2,000 much needed affordable housing units to California's pipeline and is expected to create approximately 60,000 permanent jobs. In total, the proposed project will have positive economic impacts at the local and regional levels, and on California as a whole.

The Chamber urges the California Department of Fish and Wildlife to approve the AEA.

Response No. 05-2:

This comment expresses support for the development associated with the project. The comment also expresses specific support for the housing, including affordable housing, and employment generation resulting from the development associated with the project. This comment is noted for the record and is included in this Final AEA for review and consideration by the decision-makers.

06. Letter from Snowy Dodson, California Native Plant Society, dated February 6, 2017

Comment No. 06-1:

Please find comments respectfully submitted by California Native Plant Society.

Response No. 06-1:

The comment is acknowledged as an introduction to the comments that follow. No further response is required.

Comment No. 06-2:

The California Native Plant Society (CNPS) has reviewed the DEIR for Newhall and the SCP EIR for *Chorizanthe parryi* ssp. *fernandina* (San Fernando Valley spineflower) and provide the following comments.

We find the both management plans to be incomplete, not employ best and most recent science, have flawed or little analyses, and serve as threats to the habitat and native plants both within the project area and entire watershed. Based on all available information, existing conditions, and proposed land management activities, we recommend the Department request both plans be more comprehensively researched for scientific acuity, long-term sustainability, and benefits to the environment at the watershed level.

Response No. 06-2:

The comment states that the California Native Plant Society (CNPS) “has reviewed the DEIR for Newhall and the SCP EIR” and finds “both management plans” to be incomplete, analytically flawed, and not based on the best and most recent science. The comment also describes the two plans as “threats to the habitat and native plants both within the project area and the entire watershed.” The comment then requests that “both plans be more comprehensively researched for scientific acuity, long-term sustainability, and benefits to the environment at the watershed level.” As an initial matter, the comment does not clearly identify which document(s) it is addressing. The only document currently under review is the Draft AEA prepared by CDFW and released for public review in November 2016. The Draft AEA addresses two issues: (1) the EIR’s GHG emissions significance findings, and (2) construction modifications to bridges and bank stabilization in a manner that avoids all contact with the wetted channel of the Santa Clara River (i.e., the “No Water Contact” construction approach).

The comment does not appear to address either of these issues, but instead is focused on project-related impacts on the San Fernando Valley spineflower (spineflower), the protection of which is addressed the spineflower ITP (ITP) approved by CDFW in December 2010, the SCP, also approved by CDFW in December 2010, and the 2010 Final EIR, Section 4.5, Biological Resources, and the mitigation measures associated with the avoidance and minimization of impacts to spineflower. To the extent the comment challenges the spineflower ITP, the SCP, or the 2010 Final EIR’s analysis and mitigation of impacts on spineflower, the comment is outside the scope of the Draft AEA and is substantively barred by the Court of Appeals’ decision in *Center for Biological Diversity (CBD) v. CDFW* (2016 1 Cal.App.5th 452), which upheld the analysis of impacts to spineflower and thereby reversed the trial court’s earlier ruling that on that issue.

Comment No. 06-3:

I. Resource Management & Development Plan (RMDP)

A. Naturally Occuring Water Features

The development will underground and otherwise channel all existing tributaries to the Santa Clara River. ‘Low Impact Development’ design elements will be employed that create swales, infiltration points for above non-channeled areas, and other landscape catchments. The channelization of naturally occurring Waters on the property will decimate existing native plant habitat throughout those areas and degrade Beneficial Uses

as required by California Fish & Wildlife Code and the Porter-Cologne Water Quality Act. The paucity of horticultural incorporation of locally native plants into the landscape palette for the RMDP further exacerbates the environmental costs to the site, tangential, and regional natural resources.

Response No. 06-3:

The comment states that the project “will underground and otherwise channel all existing tributaries to the Santa Clara River.” The comment describes some of the “low impact design” features to be implemented as part of the project. The comment states that channelizing natural waters on the site “will decimate existing native plant habitat throughout those areas and degrade Beneficial Uses.” The comment then states that the “paucity of horticultural incorporation of locally native plants into the landscape palette for the RMDP further exacerbates the environmental costs to the site, tangential, and regional natural resources.”

As an initial matter, the comment does not address an issue currently under review in the Draft AEA; and, thus, is beyond the scope of the AEA (see **Topical Response 1: Scope of Additional Environmental Analysis**).

The comment does not appear to address either of these issues, but instead is focused on tributary drainage impacts within the project – a topic that received extensive analysis in the 2010 Final EIR. For information addressing the project’s tributary drainage impacts and mitigation, please refer to the 2010 Final EIR, Section 2.0, Project Description, Section 4.1, Surface Water Hydrology and Flood Control; Section 4.2, Geomorphology and Riparian Resource; 4.5, Biological Resources; and Section 4.6, Jurisdictional Waters and Streams. No specific aspect of this analysis is challenged, nor can it be due to the need for finality.

In addition, the tributary-impact issues raised in the comment were addressed in the 2010 Final EIR, but not challenged in the *CBD v. CDFW* litigation or the related litigation over the adequacy of the EIR prepared by the County of Los Angeles for the Newhall Ranch Mission Village project – litigation in which CNPS was a party; and, thus, those issues are beyond challenge in this stage of the project’s proceedings. For these reasons, no further response is required.

Comment No. 06-4:

Proposed ‘armoring’ and alignment of the Santa Clara River and related storm drain outfalls significantly depreciate the project site and downstream fluvial processes.

Response No. 06-4:

The comment states that proposed armoring and alignment of the Santa Clara River and related storm drain outfalls will “significantly depreciate the project site and downstream fluvial processes.”

As an initial matter, the comment does not address an issue currently under review in the Draft AEA; and, thus, is beyond the scope of the AEA (see **Topical Response 1: Scope of Additional Environmental Analysis**). The comment is focused on the so-called armoring of the Santa Clara River and the storm drain outfalls – topics that received extensive analysis in the 2010 Final EIR. For responsive information, please refer to the 2010 Final EIR, Section 2.0, Project Description, Section 4.1, Surface Water Hydrology and Flood Control, Section 4.2, Geomorphology and Riparian Resources.

In addition, the Santa Clara River impacts and the storm drain outfall issues that are raised in the comment were addressed in the 2010 Final EIR, but not challenged in the *CBD v. CDFW* litigation or the related litigation over the adequacy of the EIR prepared by the County of Los Angeles for the Newhall Ranch Mission Village project – litigation in which CNPS was a party; and, thus, those issues are beyond challenge in this stage of the project’s proceedings. For these reasons, no further response is required.

Comment No. 06-5:

First, removal of naturally occurring vegetation on the riverbank removes biotic ecosystem services needed to sustain the riverine habitat.

Response No. 06-5:

The comments states that “removal of naturally occurring vegetation on the riverbank removes biotic ecosystem services needed to sustain the riverine habitat.”

First, to the extent the comment suggests that the proposed “No Water Contact” approach to bridge and bank stabilization construction will result in new, additional, or more severe impacts on riparian vegetation and riverine habitat, the Draft AEA explains that the locations and impact areas of the bridges and bank stabilization features have not changed from what was analyzed in the 2010 Final EIR. Accordingly, the project would not cause impacts on riparian vegetation or riverine habitat beyond those analyzed in the 2010 Final EIR.

Second, the comment does not appear to address a specific issue currently under review in the Draft AEA; and, thus, is beyond the scope of the AEA (see **Topical Response 1: Scope of Additional Environmental Analysis**). The comment is focused on removal of native vegetation on or along the Santa Clara River and the loss of habitat functions and values – topics that were extensively evaluated in the 2010 Final EIR. For responsive information, please refer to the 2010 Final EIR, Section 4.1, Surface Water Hydrology and Flood Control; Section 4.2, Geomorphology and Riparian Resources; Section 4.5, Biological Resources; and Section 4.6, Jurisdictional Waters and Streams.

Third, the Santa Clara River habitat impact issues that are raised in the comment were addressed in the 2010 Final EIR, but not challenged in the *CBD v. CDFW* litigation or the related litigation over the adequacy of the EIR prepared by the County of Los Angeles for the Newhall Ranch Mission Village project – litigation in which CNPS was a party; and, thus, those issues are beyond challenge in this stage of the project’s proceedings. For these reasons, no further response is required.

Comment No. 06-6:

Second, armoring and alignment considerably contribute to velocity and intensity of the Santa Clara River waters, which are considered some of the most unpredictable in the State.

Response No. 06-6:

The comment states that “armoring and alignment considerably contribute to velocity and intensity of the Santa Clara River waters, which are considered some of the most unpredictable in the [s]tate.”

First, please refer to **Response to Comment 06-4** for responsive information.

Second, if the comment is suggesting that the “No Water Contact” approach to the construction of bridges and bank stabilization will “considerably contribute to velocity and intensity of Santa Clara River waters,” the Draft AEA explains that the locations and impact areas of the bridges and bank stabilization features have not changed from what was analyzed in the 2010 Final EIR. Accordingly, the project would not cause impacts on riparian vegetation or riverine habitat beyond those analyzed in the 2010 Final EIR.

Third, the comment does not appear to address a specific issue currently under review in the Draft AEA; and, thus, is beyond the scope of the AEA (see **Topical Response 1: Scope of Additional Environmental Analysis**). The comment is focused on the velocity and intensity of flows in the Santa Clara River – a topic was extensively evaluated in the 2010 Final EIR. For responsive information, please refer to the 2010 Final EIR, Section 4.1, Surface Water Hydrology and Flood Control, Section 4.2; Geomorphology and Riparian Resources; Section 4.5, Biological Resources; and Section 4.6, Jurisdictional Waters and Streams.

Fourth, the Santa Clara River flow velocity and intensity issues that are raised in the comment were addressed in the 2010 Final EIR, but not challenged in the *CBD v. CDFW* litigation or the related litigation over the adequacy of the EIR prepared by the County of Los Angeles for the Newhall Ranch Mission Village project – litigation in which CNPS was a party; and, thus, those issues are beyond challenge in this stage of the project’s proceedings. For these reasons, no further response is required.

Comment No. 06-7:

Third, the proposed management measures for the river are sure to worsen adjacent and downstream river corridor. Data for the Santa Clara River clearly shows the narrowing and incising is due to structural flow management from development. The river channel ecosystem has narrowed by 50% since 1950, riverbank erosion by incision increased, and historically vibrant and necessary riverine vegetation significantly reduced.¹ The impacts to the river system at the site and downstream to the Pacific Ocean from the Newhall Ranch development will be equivalent to cumulative development imprint in the river channel to date.

¹ Downs, PW; Dusterhoff, SR; Sears, WA. 2013. Reach-scale channel sensitivity to multiple human activities and natural events, Lower Santa Clara River, CA, USA. *Geomorphology*. 189:121-134.

Response No. 06-7:

The comment states that “the proposed management measures for the river are sure to worsen adjacent and downstream river corridor.” According to the comment, data “clearly shows the narrowing and incising is due to structural flow management from development.” The comment also contends that the “river channel ecosystem has narrowed by 50% since 1950, riverbank erosion by incision increased, and historically vibrant and necessary riverine vegetation significantly reduced.” The comment then states that “impacts to the river system at the site and downstream to the Pacific Ocean from the Newhall Ranch development will be equivalent to cumulative development imprint in the river channel to date.”

As an initial matter, the comment does not identify or describe the “proposed management measures,” which the commenter believes will worsen conditions in the “adjacent and downstream river corridor.” Nor does the comment explain how such measures would have the adverse effects listed. For those reasons, a further response is not required. Nonetheless, CDFW provides further information in an effort to be as responsive as possible.

Second, the 2010 Final EIR extensively analyzed the project’s impacts on stream morphology, including riverbank erosion and incision, on both a project-specific and cumulative impact scale. That analysis was presented in the 2010 Final EIR, Section 4.1, Surface Water Hydrology and Flood Control; Section 4.2, Geomorphology and Riparian Resources; Section 4.5, Biological Resources; and Section 4.6, Jurisdictional Waters and Streams. No specific aspect of this analysis is challenged, nor can it be due to the need for finality.

Third, the Santa Clara River erosion and incision issues that are raised in the comment were addressed in the 2010 Final EIR, but not challenged in the *CBD v. CDFW* litigation or the related litigation over the adequacy of the EIR prepared by the County of Los Angeles for the Newhall Ranch Mission Village project – litigation in which CNPS was a party; and, thus, those issues are beyond challenge in this stage of the project’s proceedings. For these reasons, no further response is required.

Fourth, the comment does not assert any connection between river morphology impacts and the two issues addressed in the Draft AEA. Nor does the comment raise any issue as to the adequacy of the Draft AEA. Thus, no further response is required. Although no further response is required in regard to river morphology impacts, the following information addresses the substantive elements of the comment and referenced study. The comment mixes locations and time scales, and, thus, is not considered comparable to conditions within the project development area. Specifically, the comment refers to a journal article about the lower Santa Clara River, and effects of development since 1950. The project area is within the upper Santa Clara River, which is far more resilient than the lower Santa Clara River. Further, the project is fundamentally different from those cited in the journal article as the design specifically incorporates the preservation of a natural river system as a guiding principle, something that was rarely, if ever, considered and used in the areas considered since 1950. In addition, the conclusion of the article is that natural factors largely control the geomorphology of the lower Santa Clara River, and that the effects of human-scale development can be difficult to discern against this highly variable natural background. This conclusion, at least, also refers to the upper Santa Clara River. As noted above, the 2010 Final EIR incorporated extensive hydrologic, hydraulic,

and sediment transport modeling to design the project to minimize geomorphic effects to the Santa Clara River, both locally and at a watershed scale.

Comment No. 06-8:

Furthermore, removal of native vegetation in the watershed and sub-watersheds of the proposed Newhall Ranch development combined with the transformation of open space to impervious urbanized surfaces will significantly increase runoff along with erosion and flood potential. The Santa Clara River watershed reach located within the project area is projected to have the following increases of flood events within the next 20 years based on rates of urbanization and climate change in the immediate area:²

- o 2-year – 54%
- o 10-year – 61%
- o 50-year – 62%

² Sheng, J; Wilson, JP. 2009. Watershed urbanization and changing flood behavior across the Los Angeles metropolitan region. *Natural Hazards*. 48:1:41-57

Response No. 06-8:

The comment states that “removal of native vegetation in the watershed and sub-watersheds of the proposed Newhall Ranch development combined with the transformation of open space to impervious urbanized surfaces will significantly increase runoff along with erosion and flood potential.” The comment also states that the Santa Clara River watershed reach located within the project area is projected to increase flood events between 54 percent and 62 percent over the next 20 years based on rates of urbanization and climate change in the immediate area.

First, as to “removal of native vegetation in the watershed and subwatershed,” please see **Response to Comment No. 06-5**, above.

Second, with regard to the comment about converting natural areas to “impervious urbanized surfaces” and subsequent increases in runoff, erosion, and flood potential, those issues were extensively analyzed in the 2010 Final EIR, Section 4.1, Surface Water Hydrology and Flood Control; Section 4.2, Geomorphology and Riparian Resources; Section 4.5, Biological Resources; and Section 4.6, Jurisdictional Waters and Streams. No specific aspect of this analysis is challenged, nor can it be due to the need for finality.

Third, the Santa Clara River erosion/flood impact issues that are raised in the comment were addressed in the 2010 Final EIR, but not challenged in the *CBD v. CDFW* litigation or the related litigation over the adequacy of the EIR prepared by the County of Los Angeles for the Newhall Ranch Mission Village project – litigation in which CNPS was a party; and, thus, those issues are beyond challenge in this stage of the project’s proceedings.

Fourth, the comment does not assert any connection between erosion/flood impacts and the two issues addressed in the Draft AEA. Thus, no further response is required.

Fifth, the comment refers to percentage increases in flood flows – a topic that was extensively addressed in the 2010 Final EIR, Section 4.1, Surface Water Hydrology and Flood Control, and, specifically, subsection 6.5.2.2. The comment does not question the adequacy of that analysis.

Finally, the comment cites a watershed urbanization/flood article, which CDFW has considered. In response, CDFW prefers to rely on the project-specific data developed in connection with the site and its characteristics over an article addressing the Los Angeles metropolitan area. The article does not question the project-specific data presented in the 2010 Final EIR. In the conclusions and discussion section, the article acknowledges that the “response of flood behavior to urban watersheds of the same population density *could vary* from watershed to watershed due to variations in the character of the impervious surface and its

connectivity with the stormwater conveyance system and stream network [italics added],” which supports CDFW’s preference for project-specific data.

Comment No. 06-9:

II. Wildlands Encroachment and Take

The RMDP neglects to analyze existing ecosystem services, losses once take occurs, environmental costs: benefits analyses of habitat values currently present versus the built and horticultural replacement planned by the project.

Response No. 06-9:

The comments states that the “RMDP neglects to analyze existing ecosystem services, losses once take occurs, environmental costs: benefits analyses of habitat values currently present versus the built and horticultural replacement planned by the project.”

First, the comment does not address an issue currently under review in the Draft AEA; and, thus, is beyond the scope of the AEA (see **Topical Response 1: Scope of Additional Environmental Analysis**). The comment is focused on the RMDP and the claim of a failure to analyze (unspecified) existing ecosystem services, losses once take occurs, and environmental costs/benefits of habitat values of present versus built project. To the extent the comment is referring to project impacts to biological resources within aquatic, riparian, and upland ecosystems on the project site – these topics received extensive analysis in the 2010 Final EIR. For information addressing the project’s RMDP impacts and mitigation, please refer to the 2010 Final EIR, Section 2.0, Project Description; Section 4.1, Surface Water Hydrology and Flood Control; Section 4.2, Geomorphology and Riparian Resources; 4.5, Biological Resources; and Section 4.6, Jurisdictional Waters and Streams. Sections 4.5 and 4.6 specifically evaluated project impacts on ecosystem services, functions, and habitat values. No specific aspect of this analysis is challenged, nor can it be due to the need for finality.

Second, the referenced RMDP impacts raised in the comment were addressed in the 2010 Final EIR, but not challenged in the *CBD v. CDFW* litigation or the related litigation over the adequacy of the EIR prepared by the County of Los Angeles for the Newhall Ranch Mission Village project – litigation in which CNPS was a party; and, thus, those issues are beyond challenge in this stage of the project’s proceedings. For these reasons, no further response is required.

Comment No. 06-10:

The RMDP fails to consider edge effects of the proposed development and nearby existing developments to the open space areas and habitat planned for conservation and recreation.

Response No. 06-10:

The comment states that the RMDP fails to consider development edge effects and nearby existing developments to the open space areas and habitat planned for conservation and recreation.

First, the comment does not address an issue currently under review in the Draft AEA; and, thus, is beyond the scope of the AEA (see **Topical Response 1: Scope of Additional Environmental Analysis**). The comment is focused on development edge effects in relation to open space and planned conservation and recreation areas – topics that received extensive analysis in the 2010 Final EIR. For responsive information, please refer to the 2010 Final EIR, Section 4.5, Biological Resources. No specific aspect of this analysis is challenged, nor can it be due to the need for finality.

Second, the referenced development edge effects raised in the comment were addressed in the 2010 Final EIR, but not challenged in the *CBD v. CDFW* litigation or the related litigation over the adequacy of the EIR prepared by the County of Los Angeles for the Newhall Ranch Mission Village project – litigation in which CNPS was a party; and, thus, those issues are beyond challenge in this stage of the project’s proceedings. For these reasons, no further response is required.

Comment No. 06-11:

The Plan does not consider impacts to native plant communities and habitat by proposed development and land management activities. There is no scientific analyses regarding alternatives to the management plan.

Response No. 06-11:

The comment states that “the Plan does not consider impacts to native plant communities and habitat by proposed development and land management activities,” and there is no scientific analysis regarding alternatives to the “management plan.”

First, the comment appears to relate to the Newhall Ranch RMDP as a whole and not to the two issues currently under review in the Draft AEA; and, thus, is beyond the scope of the AEA (see **Topical Response 1: Scope of Additional Environmental Analysis**).

Second, the RMDP comments raised here were addressed in the 2010 Final EIR, but not challenged in the *CBD v. CDFW* litigation or the related litigation over the adequacy of the EIR prepared by the County of Los Angeles for the Newhall Ranch Mission Village project – litigation in which CNPS was a party; and, thus, those issues are beyond challenge in this stage of the project’s proceedings. For these reasons, no further response is required.

Though no further response is required, the 2010 Final EIR also evaluated numerous alternatives to the project (including the RMDP and SCP) in Section 3.0, Description of Alternatives and Section 5.0, Comparison of Alternatives. The alternatives analysis was challenged unsuccessfully in the *CBD v. CDFW* litigation, which is described in the Draft AEA and record, and is beyond challenge at this stage of the project’s proceedings.

Comment No. 06-12:

soils – The thousands of acres of open space that will ultimately be impacted and disturbed by development activities, residential, and commercial activities at Newhall Ranch will severely impact existing ecosystem and biogeochemical processes, along with the life-sustaining carbon, nitrogen, and phosphorus cycles of within the local and regional watershed. Removal of native vegetation in concert with soil disturbing activities of grading and earth removal will significantly contribute to atmospheric carbon release.³ The RMDP does not address measures to ensure native vegetation and soils conditions will be conserved for ecosystem services and greenhouse gas management.

³ Schlesinger, W.H. & Andrews, J.A. 2000. Soil respiration and the global carbon cycle. *Biogeochemistry*. 48:7-20.

Response No. 06-12:

The comment states that the project “will severely impact existing ecosystem and biogeochemical processes, along with the life-sustaining carbon, nitrogen, and phosphorus cycles of within the local and regional watershed.” In addition, the comment states that removing “native vegetation in concert with soil disturbing activities of grading and earth removal will significantly contribute to atmospheric carbon release.” Finally, the comment states that the “[t]he RMDP does not address measures to ensure native vegetation and soils conditions will be conserved for ecosystem services and greenhouse gas management.”

The comment addresses the project’s overall impacts to ecosystems and biogeochemical processes, which are issues beyond the scope of the Draft AEA. Moreover, the project’s impacts on ecosystems and biogeochemical processes, including impacts related to loss of native vegetation and soil disturbance, were addressed in the 2010 Final EIR, Section 4.6, Jurisdictional Waters and Streams, and not legally challenged. Consequently, it is too late to raise such issues now.

As to the comment’s discussion of the project’s impacts to soils that assist with the management (i.e., sequestration) of GHG emissions, the Draft AEA uses CalEEMod® to estimate the GHG emissions that would

result from the project's vegetation removal activities. CalEEMod® is recommended by the South Coast Air Quality Management District (SCAQMD), the regional air district with jurisdiction over the project site, for analyzing GHG emissions under CEQA and is widely used by CEQA lead agencies, including Los Angeles County. For purposes of the Draft AEA's GHG emissions analysis, reliance on CalEEMod® to estimate construction-related GHG emissions satisfies CEQA Guidelines Section 15064.4(a)(1), which allows a lead agency to select the model and methodology it considers most appropriate for the analysis.

CalEEMod® and, by extension, the Draft AEA, also follow published guidance on how the loss of carbon sequestration should be estimated upon the removal of existing vegetation. Specifically, in accordance with the Intergovernmental Panel on Climate Change's (IPCC) guidelines,¹ the total amount of carbon released from the project's vegetation removal activities is calculated based on the assumption that the existing vegetation becomes dead organic matter (DOM) upon removal during the site preparation phase. Therefore, the 70,149 metric tons of carbon dioxide equivalent (MT CO_{2e}) identified in Draft AEA Table 2.3-2, Vegetation Change Evaluation, is the carbon released as estimated by converting the DOM biomass from the existing vegetation to CO_{2e} emissions in accordance with the IPCC guidelines. (See also Draft AEA Appendix 1, Section 2.2.2 and Table 2-10b.) The estimated 70,149 MT CO_{2e} is the one-time release of GHG emissions from removed vegetation biomass; it is not assumed that the vegetation can absorb more CO_{2e} each year if it remains in place. The carbon fraction in plant material is assumed to be 0.47 per IPCC data and the carbon is assumed to be converted to CO₂.² Please see **Response to Comment No. 09-11** for additional information regarding the use of CalEEMod® to estimate the subject GHG emissions.

Quantification of more detailed emissions information that looks directly into soil disturbance requires site-specific information that is not readily available and such calculations, and, therefore, would be speculative. An in-depth soil assessment and the calculation of emissions from soil movement also would be beyond the scope of analysis required by CalEEMod® and CEQA (see CEQA Guidelines Section 15064.4(a)(1)).

Finally, the comment implies that the project's GHG emissions from vegetation changes have been insufficiently mitigated; however, the Draft AEA's GHG mitigation framework serves to provide that the project results in no net increase in GHG emissions. In other words, emits zero net GHG emissions.

Comment No. 06-13:

native tree removal – The RMDP fails to address environmental compensation for slated removal of native oaks, walnut, sycamore, cottonwood, and willow within project footprint. The leaf litter alone from these trees is responsible for up to 50% soil carbon storage in the areas where they grow. The Plan does not address adequate mitigation to the River, uplands, and ecosystems these important species provide.⁴

⁴ Yanai, R., Currie, W. & Goodale, C. Soil carbon dynamics after forest harvest: a system paradigm reconsidered. *Ecosystems* (2003) 6: 197

Response No. 06-13:

The comment references the RMDP; however, the document under review is the Draft AEA, not the RMDP. The comment states that the RMDP “fails to address environmental compensation for slated removal of native oaks, walnut, sycamore, cottonwood, and willow within project footprint. The leaf litter alone from these trees is responsible for up to 50 percent soil carbon storage in the areas where they grow. The Plan does not address adequate mitigation to the river, uplands, and ecosystems these important species provide.” To the extent the comment is referring to the Draft AEA, the comment raises issues beyond the scope of the AEA (see **Topical Response 1: Scope of Additional Environmental Analysis**).

¹ IPCC, “2006 IPCC Guidelines for National Greenhouse Gas Inventories” (2006), Volume 4: Agriculture, Forestry and Other Land Use, Chapter 2: Generic Methodologies Applicable to Multiple Land-Use Categories, p. 2.25, available at http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/4_Volume4/V4_02_Ch2_Generic.pdf, accessed on February 17, 2017.

² “Appendix A: Calculation Details for CalEEMod,” prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), p. 51, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2>, accessed on February 17, 2017.

The 2010 Final EIR analyzed, and provided mitigation for, the project's impacts on native trees, including oaks, walnuts, sycamore, cottonwoods, and willows. For responsive information, please refer to the 2010 Final EIR, Section 4.5, Biological Resources. No specific aspect of this analysis is challenged, nor can it be due to the need for finality. Moreover, the comment draws no connection between the two issues studied in the Draft AEA: (1) the EIR's GHG emissions significance findings, and (2) construction modifications to bridges and bank stabilization in a manner that avoids all contact with the wetted channel of the Santa Clara River (i.e., the "No Water Contact" construction approach). For these reasons, no further response is required.

Comment No. 06-14:

sage scrub ecosystem – this most threatened of ecosystems in the state also serves as a carbon sink. Much of the project area is located within this habitat type. Areas on the edge of the development will serve as nurseries for alien invasive plant species, which will further threaten habitat values for this rare ecosystem type. Sage scrub with high percentage of non-natives shows a dramatic loss of functionality as a carbon sink. Succession through mature sage scrub growth restores biotic balance and capacity to outcompete alien species and serve as a significant carbon sink.⁵ The RMDP does not address adequate protections for sage scrub habitat.

⁵ Coyle, D. R., Nebeker, T.E., Hart, E.R., Mattson, W.J. January 2005. Biology and management of insect pests in North American intensively managed hardwood forest systems. *Annual Review of Entomology*. 50:1-29

Response No. 06-14:

The comment references the RMDP; however, the document under review is the Draft AEA, not the RMDP. The comment states that the ecosystem of which the project site is a part "serves as a carbon sink," and that the proposed development threatens the ecosystem's ability to function in this role. Specifically, the comment states that "[a]reas on the edge of the development will serve as nurseries for alien invasive plant species, which will further threaten habitat values for this rare ecosystem type," and that "sage scrub with high percentage of non-natives shows a dramatic loss of functionality as a carbon sink." The comment also states that "[s]uccession through mature sage scrub growth restores biotic balance and capacity to outcompete alien species and serve as a significant carbon sink." The comment then states that the RMDP fails to address adequate protections for sage scrub habitat." The comment raises issues beyond the scope of that analysis included in the Draft AEA.

In addition, the comment critiques the RMDP for not analyzing the overall project's impacts on sage scrub habitat and, more particularly, the role that habitat plays in sequestering carbon. The 2010 Final EIR addressed project impacts on coastal sage scrub habitat, including impacts associated with the introduction of invasive/alien species. (See 2010 Final EIR, Section 4.5.5.3, pp. 4.5-175 through 4.5-1788.) The 2010 Final EIR also addressed project impacts on the current ecosystem to sequester carbon. (2010 Final EIR, Section 4.5.5.3, pp. 4.5-1755 through 4.5-1788.) Neither of these analyses was challenged in the *CBD v. CDFW* litigation; consequently, they are beyond challenge at this time.

As to the GHG emissions resulting from the project's disturbance of sage scrub habitat, the Draft AEA's GHG emissions analysis accounts for the removal of 2,090.3 acres of scrub (which includes sage scrub) and estimates carbon emissions from this vegetation change. As shown in the Draft AEA, Table 2.3-2, the one-time release of GHG emissions from the scrub removal is estimated to be 29,892 MT CO₂e. Thus, the Draft AEA accounts for carbon emissions from scrub removal. As addressed in **Response to Comment No. 06-12** above, all of the project's GHG emissions are reduced to zero through implementation of Mitigation Measures 2-1 through 2-13. Therefore, the AEA has sufficiently accounted for and mitigated the GHG emissions impacts from the project's vegetation changes specific to sage scrub removal.

Comment No. 06-15:

freshwater Santa Clara River ecosystem - Recent research determined twice as much carbon enters this ecosystem type than ambient terrestrial areas. Aquatic sediment holds 11% of the ecosystem carbon.

Carbon dioxide is released by 42% of these ecotypes. Equal amounts of inorganic and organic carbon are discharged from these systems into the ocean. The role of freshwater carbon transport, oxidation, and storage is therefore significant.⁶ However, the urbanization of the river within the project development corridor will no longer support the riverine ecosystem due to removal of native vegetation resulting in higher water temperatures, increased non-point source and point source pollution, encroachment by humans and domestic animals, and disruption of the river habitat corridor.

⁶ Cole, J.J., Prairie, Y.T., Caraco, N.F. et al. Plumbing the global carbon cycle: integrating inland waters into the terrestrial carbon budget. *Ecosystems*. 2007. 10:172.

Response No. 06-15:

The comment provides information regarding the role that aquatic sediments and freshwater systems play in sequestering and discharging carbon. The comment then states that “the urbanization of the river within the project development corridor will no longer support the riverine ecosystem due to removal of native vegetation resulting in higher water temperatures, increased non-point source and point source pollution, encroachment by humans and domestic animals, and disruption of the river habitat corridor.”

The issue of aquatic sediments is beyond the scope of the Draft AEA, which only covers: (1) the EIR’s GHG emissions significance findings, and (2) construction modifications to bridges and bank stabilization in a manner that avoids all contact with the wetted channel of the Santa Clara River (i.e., the “No Water Contact” construction approach). Moreover, the project’s impacts on ecosystems – including impacts related to loss of native vegetation and soil disturbance, impacts to water quality, impacts to wetlands, and impacts to riverine habitat – were addressed in the 2010 Final EIR, Section 4.2, Geomorphology and Riparian Resources, and Section 4.5, Biological Resources. To the extent that those analyses, or any one of them, were challenged in the *CBD v. CDFW* litigation, they have been upheld by the courts and are not subject to additional review. To the extent those analyses were not challenged in *CBD v. CDFW*, any allegations as to defects in those analyses were not “preserved” for purposes of the current AEA and, therefore, cannot be raised now. Note also that although the applicant is now proposing to construct bridges and bank stabilization features without contacting the wetted channel of the Santa Clara River, this revision does not alter the impact footprint of the bridges or bank stabilization improvements. In terms of size, dimension, and location, the impact footprints will be the same as those assessed in the 2010 Final EIR.

As to the carbon sequestration provided by aquatic sediments, the comment does not identify any specific flaw or error in the assumptions used in the Draft AEA’s estimation of GHG emissions attributable to the project’s vegetation change activities. The project also is designed to facilitate the long-term persistence and integrity of a corridor for the Santa Clara River, including its aquatic sediments.

Comment No. 06-16:

Newhall natural resources management plan

Finally, the RMDP approaches to ecosystem planning appear not to be adaptive, flexible, analytical, collaborative, and resilient. Priority considerations should include:

- ▲ Insurance that areas with high topographic diversity and intact migration corridors that enable species to migrate readily in response to rapid environmental change
- ▲ Retention of corridors such as urban green spaces with native vegetation
- ▲ Protections for the existing functional riparian corridor and all tributaries
- ▲ Prioritizing conservation of biodiversity hotspots, locations, and pathways that enable species to adjust to rapid environmental change from development and climate change
- ▲ Preservation of genetic and species diversity within the project and fringe areas
- ▲ Renewing functional diversity of degraded systems

Response No. 06-16:

The comment refers to the RMDP; however, the document under review is the Draft AEA, not the RMDP. The comment states that RMDP's "approaches to ecosystem planning appear not to be adaptive, flexible, analytical, collaborative, and resilient." The comment then lists six "priority considerations" which, in the opinion of CNPS, should be included in the RMDP. To the extent that the comment is referring to the Draft AEA, the comment raises issues beyond the scope of that analysis (as explained below).

The comment does not address the two issues covered in the Draft AEA. The comment, therefore, is beyond the scope of the AEA (see **Topical Response 1: Scope of Additional Environmental Analysis**). In addition, the issues raised in the comment were addressed in the 2010 Final EIR, Section 4.2, Geomorphology and Riparian Resources; Section 4.5, Biological Resources; and Section 4.6, Jurisdictional Waters and Streams, but not challenged in the *CBD v. CDFW* litigation. As such, the comments were not legally "preserved" for purposes of the current Draft AEA; and it is too late to raise those issues now. For these reasons, no further response is required.

Comment No. 06-17:

II. Spineflower Management Plan (SMP)

A recent report about San Fernando Valley spineflower states "At this time, we conclude that there may not be sufficient resiliency, representation, or redundancy to sustain SFVS over the long term, given current and future stressors acting upon the taxon." The FWS report added the species is under high magnitude threat and low recovery potential. It is currently being considered for elevated list status by the agency.

Response No. 06-17:

The comment provides information regarding the San Fernando Valley spineflower (spineflower) derived from the report titled, *Species Report for the San Fernando Valley Spineflower (Chorizanthe parryi var. fernandina)*, August 12, 2016, prepared by USFWS. The report is a status review of the spineflower to determine if it is warranted for listing as threatened or endangered under the Endangered Species Act (ESA).

Spineflower is currently designated a candidate species under the ESA, which means USFWS has sufficient information on its biological status and threats to propose it for listing as endangered or threatened under the ESA, but for which development of the proposed listing regulation is precluded by other higher priority listing activities. As of 2004, USFWS changed the candidate listing priority for spineflower from 3 to 6 because threats of habitat destruction or modification were less than previous, because the proposed development (Ahmanson Ranch) at Laskey Mesa did not move forward and this site was purchased by the State of California, which became part of the Upper Las Virgenes Canyon Open Space Preserve. Priority 6 denotes a subspecies, or variety, facing a non-imminent threat of high magnitude and low recovery potential. USFWS's candidate listing does not protect spineflower under the ESA.

However, since August 2001, spineflower has been listed as endangered by CDFW under the California Endangered Species Act (CESA). The CESA allows for take of an endangered or threatened species if incidental to otherwise lawful activity. The CESA also emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species, and to develop appropriate mitigation planning to offset project-caused losses of listed species. The CESA's take of an endangered or threatened species can only occur as part of a CDFW-issued ITP.

As background, the County of Los Angeles's Newhall Ranch Specific Plan additional environmental analysis, certified in 2003, evaluated Specific Plan impacts to spineflower and adopted an extensive spineflower mitigation program in close coordination with CDFW. The County's spineflower mitigation program culminated in CDFW's completion of the 2010 Final EIR, which included an extensive new analysis of spineflower impacts, mitigation, and alternatives. (See 2010 Final EIR, Section 4.5, Biological Resources; Section 3.0, Description of Alternatives; and Section 5.0, Comparison of Alternatives.) In December 2010, CDFW also approved the project's detailed SCP and issued a spineflower ITP, subject to various terms and conditions imposed by CDFW pursuant to Fish and Game Code section 2081, subdivision (b). The CDFW-

approved SCP, the spineflower ITP terms and conditions, and the 2010 Final EIR substantiate CDFW's CESA findings that project and cumulative impacts on spineflower are fully mitigated.

With that background in place, the comment states that, according to the USFWS report, the spineflower "is under high magnitude threat and low recover potential." No citation for this opinion is provided. The comment concludes by stating that the spineflower "is currently being considered for elevated list status by the agency." The following are further responses to the spineflower-related comments.

First, contrary to the comment, the federal status of spineflower remains a designated candidate plant species with a priority listing of 6, which means spineflower is "facing a non-imminent threat of high magnitude and low recovery potential" (USFWS 2016:86).

Second, the comment correctly notes that in September 2016, USFWS published the Federal Register notification of a proposed rule to list spineflower as threatened under the ESA. If USFWS finalizes the proposed rule, it would extend the ESA's protections to spineflower. No such federal rule has been adopted as of this writing, and, as stated above, since 2001, the CESA already provides protections to spineflower as a state-listed endangered plant species.

Third, the comment does not address an issue currently under review in the Draft AEA; and, thus, is beyond the scope of the AEA (see **Topical Response 1: Scope of Additional Environmental Analysis**). The comment is focused on spineflower – a topic that received extensive analysis in: (1) the 2010 Final EIR (Section 4.5, Biological Resources; Section 3.0, Description of Alternatives; and Section 5.0, Comparison of Alternatives), (2) the CDFW-approved SCP, and (3) the CDFW-issued spineflower ITP and associated terms and conditions.

Fourth, to the extent the comment challenges the SCP, the spineflower ITP, or the 2010 Final EIR's analysis of impacts on spineflower, it is outside the scope of the current Draft AEA and is substantively barred by the Court of Appeals' decision in *CBD v. CDFW* (2016) 1 Cal.App.5th 452, 459, which upheld the analysis of impacts to spineflower.

Fifth, the USFWS's proposed rule to list spineflower does not constitute significant new information because the proposed federal rule is not yet adopted, and state law already provides stringent protections for spineflower. In addition, the proposed federal rule does not constitute a substantial change in the project or its circumstances because project impacts on spineflower remain fully mitigated under state law, and the project – as modified in the Draft AEA – does not change any land uses or the development footprint of the project. Instead, project modifications are limited to implementing the "No Water Contact" construction approach for project bridges and bank stabilization, and adopting mitigation measures that result in the project reducing 100 percent of its GHG emissions.

Comment No. 06-18:

The population located within the Newhall Ranch development footprint is one of only two known extant populations. It is threatened by agriculture, non-native plant competition, climate change, encroachment by humans, recreation, and domestic animals. CNPS believes the Newhall development will diminish its survival potential, and the very real potential for random stochastic events such a modified climate changing the plants habitat suitability, that there are imminent threats of high magnitude for the extinction potential of *Chorizanthe parryi* ssp. *fernandina*.

Response No. 06-18:

The comment correctly points a fact covered in the 2010 Final EIR, namely that "the San Fernando Valley spineflower—a state-listed species—has been documented to occur only within the RMDP and SCP study areas and at Ahmanson Ranch, which is situated at the headwaters of Las Virgenes Creek in Ventura County." (See Final 2010 EIR, Section Biological Resources, p. 4.5-50.) In addition, the 2010 Final EIR incorporates an extensive spineflower life history, which includes survey results and methodology, a direct, indirect, and secondary impacts analysis, and an exhaustive spineflower mitigation strategy and summary. (See Final 2010 EIR, Section Biological Resources, pp. 4.5-1755 through 1787.) Further, CDFW required the

project applicant to complete a detailed SCP to further develop and refine the mitigation strategy for the spineflower. The spineflower ITP, informed by the EIR and the SCP, also imposed additional terms and conditions, pursuant to Fish and Game Code section 2018, subdivision (b), to ensure spineflower impacts were minimized and fully mitigated.³ Based on this prior analysis, CDFW does not concur with the opinions expressed by CNPS in its spineflower-related comments.

In addition, please refer to **Response to Comment No. 06-17** for further responsive information, including the fact that the comment is beyond the scope of the Draft AEA.

Further, the comment expresses concern about the proposed project's impact on spineflower, in light of other threats to the species. As explained in **Response to Comment Nos. 06-2** and **06-17**, above, project impacts on spineflower are beyond the scope of the Draft AEA and were extensively analyzed in the 2010 Final EIR, Section 4.5, Biological Resources; the SCP; the spineflower ITP; and CDFW's CESA findings. Moreover, the 2010 Final EIR's assessment of spineflower impacts and mitigation were upheld by the Court of Appeal in *CBD v. CDFW* (2016) Cal.App.5th 452, 459. In that decision, the Court of Appeal held that the administrative record demonstrated substantial evidence supporting CDFW's spineflower-related findings; and, in particular, that the impacts from the spineflower ITP were minimized and fully mitigated. No further review is required or warranted.

Comment No. 06-19:

Incomplete analysis of active threats

The CDFW take permit for this plant further compounds the threat of extinction to the spineflower. The SMP fails to adequately ensure sustainable long-term viability of the existing population due to a lack of addressing loss of habitat, the aforementioned threats, and population pressures listed below:

- i. development (the habitat of fifty percent of the plant is proposed to be permanently fragmented into poorly designed, small rare plant preserves),

Response No. 06-19:

The comment states that CDFW's decision to issue the ITP for spineflower "further compounds the threat of extinction" to the spineflower. CDFW does not concur with this comment; and it is contrary to the information and data already presented in the 2010 Final EIR, Section 4.5, Biological Resources; the SCP; the spineflower ITP; and CDFW's CESA findings. That information demonstrates that impacts to spineflower have been minimized and fully mitigated.

In addition, CDFW does not concur with the characterization that 50 percent of the plant will be "permanently fragmented into poorly designed, small rare plant preserves." Based on the 2010 Final EIR, SCP, and ITP data presented on spineflower, 76 percent of the cumulative area on real property owned by the project applicant, which the spineflower is currently documented to occupy, is included with the SCP preserve system approved by CDFW. The cumulative spineflower occupied area is a representation of many years of survey, where spineflower occurrences were mapped as polygons. Within the preserve boundaries and outside of the cumulative spineflower occupied area, an additional 211 acres are protected and managed for spineflower. Additionally, within the preserve boundaries, individual plants are expected to grow; and, thereby, increasing the spineflower population as described in the SCP and directed in the spineflower ITP.

Also of note, a Habitat Characterization Study being completed by Jodi McGraw, Ph.D., (an existing mitigation requirement) is intended to better inform the spineflower suitability of a given habitat area using abiotic and biotic factors, informing habitat enhancement within the preserves for expansion of preserve populations. Adaptive management included in the spineflower ITP issued by CDFW also provides for spineflower experimental translocation and reintroduction programs to establish new spineflower occurrences in open

³ The portions of CDFW's 2010 EIR relating to spineflower, the spineflower ITP, the SCP, and CDFW's CESA findings are incorporated by reference and available for public review and inspection upon request to CDFW or its consultant Ascent Environmental.

space areas, which will also rely on this habitat characterization study and other genetics work under development by Deborah Rogers of the Centers for Natural Land Management (CNLM). (See SCP, Section 10.1 and the spineflower ITP for further details.)

Second, as explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA.

Third, project impacts on spineflower – including impacts associated with the SCP and ITP– were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459.) No further review is required or warranted.

Comment No. 06-20:

ii. small isolated populations (two), nonnative plant competition (annual introduced grasses),

Response No. 06-20:

The comment states that CDFW’s decision to issue the ITP for spineflower further compounds the threat of extinction to the spineflower, due to the creation of “small isolated populations (two)” and “competition from non-native plants (annual introduced grasses).” CDFW does not concur with this comment, and it is contrary to the information and data already presented in the 2010 Final EIR, Section 4.5, Biological Resources; the SCP; the spineflower ITP; and CDFW’s CESA findings. That information demonstrates that impacts to spineflower have been minimized and fully mitigated.

In addition, CDFW does not concur with the characterization that there are only two small, isolated populations of spineflower or that competition from non-native plants is unaddressed. The 2010 Final EIR, Section 4.5, Biological Resources; the SCP; the spineflower ITP; and CDFW’s CESA findings document 7 preserves within the project. As shown on Figure 13 of the SCP, the San Martinez Grande and Potrero preserves are either entirely (San Martinez Grande) or mostly (Potrero) bordered by natural open space. (See SCP ITP, Attachment 2.) The Grapevine Mesa, Spring, and Airport Mesa, preserves are directly connected to the Santa Clara River SMA/Significant Ecological Area (SEA) 23. Similarly, the Magic Mountain preserve is directly connected to the Airport Mesa preserve by a slope that will be revegetated with native plants. Only the Entrada preserve is largely surrounded by existing and proposed development, although even this preserve borders a utility easement that will remain undeveloped, connecting the preserve to open space.

Relatedly, as to competition from non-native plants or grasses, the 2010 Final EIR Mitigation Measure BIO-25 describes restoration of disturbed portions of the spineflower preserves through revegetation with native plant communities. Areas that have greater than 30 percent absolute cover by weeds will be restored to have at least 70 percent absolute cover by native species. California Invasive Plant Council (Cal-IPC) List A and B plants that are present within the spineflower preserves will be controlled.

Nonetheless, as explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA.

Moreover, the project’s impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

Comment No. 06-21:

iii. nonnative animals (specifically Argentine ants),

Response No. 06-21:

The comment states that CDFW’s decision to issue the ITP for spineflower further compounds the threat of extinction to the spineflower, due to the introduction of non-native animals (specifically Argentine ants).

First, as explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

Nonetheless, CDFW also does not concur with the comment concerning the effects of Argentine ants. In CDFW's scientific opinion, project design features, Argentine ant-specific mitigation measures, and habitat enhancement activities required by the spineflower ITP, can and will control encroachments into the preserves, and Argentine ants will not affect pollinators and seed dispersers to the extent that spineflower reproduction will be reduced. The incorporation of Argentine ant monitoring and management measures in to the spineflower ITP is further validated by the studies cited in the 2010 and other data.

Comment No. 06-22:

iv. adverse land use including recreation and trampling, increase in fire frequency

Response No. 06-22:

The comment states that CDFW's decision to issue the ITP for spineflower further compounds the threat of extinction to the spineflower, due to "adverse land use including recreation and trampling, increase in fire frequency."

First, as explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with the comment. The Newhall Ranch Specific Plan Program EIR identified the following mitigation measures to avoid, minimize, or mitigate the loss of spineflower from events described in the comment. The mitigation included the following:

Connectivity, Reserve Design and Buffers

Mitigation Measure SP-4.6-67 requires that indirect impacts associated with the interface between the preserved spineflower populations and planned development be avoided or minimized by establishing open space connections with the Open Area, River Corridor SMA, or High Country SMA and establishing buffers around portions of the spineflower preserve(s) not connected to Open Area, the River Corridor SMA, or the High Country SMA. Open space connection and buffers shall be revegetated to mitigate for temporary disturbance due to grading.

Preserve Protection/Fencing

Mitigation Measure SP-4.6-68 requires temporary orange fencing and prohibitive signage around spineflower preserves, open space connections, and buffer areas adjacent to areas impacted by proposed development prior to and during all phases of construction. The spineflower preserve areas behind the temporary fencing shall not be accessed by construction personnel or equipment for any reason and shall not be used for storage associated with construction activities. Following the final phase of construction, permanent fencing shall be installed on the spineflower preserve boundary.

Fire Management Plan

Mitigation Measure SP-4.6-72 requires that a fire management plan be developed to avoid and minimize impacts to San Fernando Valley Spineflower (SFVS) and to protect and manage the spineflower preserves and buffers. Fuel modification activities within the spineflower preserves will be restricted to selective thinning with hand tools.

In addition, the 2010 Final EIR included additional mitigation measures responsive to CNPS's comment. For example, the 2010 Final EIR provides as follows:

Emergency Fire Response Plan

Mitigation Measure BIO-26 requires preparation of an emergency fire response plan prior to the establishment of the spineflower preserves and approval by the California Department of Fish and Game (CDFG) (now CDFW) and Los Angeles County Fire Department. In the event that a spineflower preserve or a portion of a spineflower preserve burns in a wildfire or suffers from mass movements (e.g., landslides, slope sloughing, or other geologic events), the spineflower preserve manager and Newhall Land shall promptly review the site and determine what action, if any, should be taken.

Preserve Protection/Access

Mitigation Measures BIO-35 through BIO-37 provide guidelines for the installation of permanent fencing and signage for the spineflower preserves. All portions of the spineflower preserves shall be closed with the exception of pre-identified existing dirt roads and utility easements; public access will be prohibited. Fencing shall be installed along the outside edge of the spineflower preserve and buffer areas, although specific areas adequately protected by steep terrain (1.5:1 or steeper) and/or dense vegetation may not require fencing but will require signage. Signage and fencing will be installed along the dirt road within Humble Canyon in the Grapevine Mesa Preserve. Outdoor all-weather signs (12 by 16 inches) shall be posted on spineflower preserve access gates and adjacent to road crossings, and along spineflower preserve fencing at 800-foot intervals.

Mitigation Measure BIO-52 states that, prior to grading and construction activities, a qualified biologist shall attend the pre-construction meeting to require timing/location of construction activities do not conflict with other mitigation requirements, conduct meetings with contractor describing the importance of restricting work to the restricted areas, discuss procedures for minimizing harm to or harassment of wildlife, review the construction area in the field with the contractor in accordance with the final grading plan, conduct a final field review of staking, document that all vehicles and equipment entering the project site shall be inspected and verified cleaned upon arrival during project preconstruction and construction activities, be present during initial vegetation clearing and grading; and provide reports of any conflicts or errors resulting in impacts to special-status biological resources.

Comment No. 06-23:

v. effects of landscape-level grading, erosion, artificial reconstruction for slope stabilization, channelization of all tributaries to the Santa Clara River and re-contouring of existing hydro-geology within the proposed project area that is Newhall Ranch

Response No. 06-23:

The comment states that CDFW's decision to issue the ITP for spineflower further compounds the threat of extinction to the spineflower, due to "effects of landscape-level grading, erosion, artificial reconstruction for slope stabilization, channelization of all tributaries to the Santa Clara River and re-contouring of existing hydro-geology within the proposed project area that is Newhall Ranch."

First, as explained in **Response to Comments No. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with the comment. The Newhall Ranch Specific Plan Program EIR identified the following mitigation measures to avoid, minimize, or mitigate the loss of spineflower from events described in the comment. The mitigation included the following:

Connectivity, Reserve Design and Buffers

Mitigation Measure SP-4.6-67 requires that indirect impacts associated with the interface between the preserved spineflower populations and planned development be avoided or minimized by establishing open space connections with the Open Area, River Corridor SMA, or High Country SMA and establishing buffers around portions of the spineflower preserve(s) not connected to Open Area, the River Corridor SMA, or the High Country SMA; open space connection and buffers shall be revegetated to mitigate for temporary disturbance due to grading.

Preserve Protection/Hydrologic Alterations

Mitigation Measure SP-4.6-69 addresses indirect impacts resulting from changes to hydrology at the interface between the spineflower preserves and planned development, requiring that they be avoided or mitigated. This standard will be met through the demonstration that the storm drain system achieves pre-development hydrologic conditions for the spineflower preserve(s).

Engineering, Design and Grading Modifications

Mitigation Measure SP-4.6-71 states that direct impacts to SFVS populations shall be further assessed at the subdivision map level. To avoid or substantially lessen impacts to SFVS populations, development footprints, roadway alignments, and project-specific grading may be adjusted to achieve spineflower preserve and connectivity/preserve design/buffer standards.

Water Flow Diversion and Management

Mitigation Measure SP-4.6-73 states that the subdivision map shall implement project-specific design measures to minimize changes in surface water flows to the spineflower preserves.

In addition, the 2010 Final EIR included additional mitigation measures responsive to CNPS's comment. For example, the 2010 Final EIR provides as follows:

Prevention of Construction-Related Impacts/Temporary Fencing

Mitigation Measures BIO-27 and BIO-31 provide guidelines for temporary fencing design, installation, monitoring, and repair. Spineflower preserve temporary fencing—three-strand non-barbed-wire fence or bright orange U.V.-stabilized polyethylene construction “snow” fencing, attached to metal t-posts that extend at least four feet above grade or equivalent — shall be shown on construction plans and installed prior to initiating construction clearing and grubbing activities within 500 feet of spineflower preserves. Impacts to native vegetation will be minimized and native vegetation will be restored as necessary. Appropriate Best Management Practices (BMP) shall be installed at the edge of development manufactured slopes when the spineflower preserve is within 200 feet and downslope of proposed development.

Prevention of Construction-related Impacts

Mitigation Measures BIO-28 through BIO-30, BIO-32, and BIO-33 minimize construction-related impacts in spineflower preserves by requiring “environmental education sessions,” incorporating dust control, erosion control, and water quality plans (as required in the project Stormwater Pollution Prevention Plan [SWPPP]), and Argentine ant monitoring into construction plans and requiring weekly construction monitoring for all construction activities within 500 feet of spineflower preserve areas.

Mitigation Measures BIO-52 states that, prior to grading and construction activities, a qualified biologist shall attend the pre-construction meeting to ensure timing/location of construction activities do not conflict with other mitigation requirements, conduct meetings with contractor describing the importance of restricting work to the restricted areas, discuss procedures for minimizing harm to or harassment of wildlife, review the construction area in the field with the contractor in accordance with the final grading plan, conduct a final field review of staking, document that all vehicles and equipment entering the project site shall be inspected and verified cleaned upon arrival during project preconstruction and construction activities, be present during initial vegetation clearing and grading, and provide reports of any conflicts or errors resulting in impacts to special-status biological resources.

Preserve Protection/Hydrology

Mitigation Measures BIO-38 and BIO-39 specify storm drain requirements and limitations within spineflower preserve areas in order to retain pre-construction hydrologic conditions within spineflower preserves, and require that any surface water entering a spineflower preserve from the development areas during construction pass through BMPs as described in the SWPPP.

Comment No. 06-24:

Missing in the analysis of threats is the current land use (irrigated agriculture, non-native animals including Argentine ants in occupied habitat, grazing, and oil fields) at the Newhall site.

Response No. 06-24:

The comment states that Draft AEA fails to analyze the threats to spineflower posed by current land uses at the project site.

First, as explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with the comment. As shown above in **Response to Comment Nos. 06-22 and 06-23**, both the Newhall Ranch Specific Plan Program EIR and the 2010 Final EIR incorporates extensive mitigation measures to protect spineflower. (See 2010 Final EIR, Section 4.5, Biological Resources, pp. 4.5-1782 through 4.5-1788.)

Comment No. 06-25:

Additionally, the current land use seems to be missing from the analysis of effects for the plant. Currently there are active agricultural operations including irrigated agriculture (Argentine ant facilitator), crop management with large equipment, and ongoing grazing. What percentage of the habitat is contaminated by the Argentine ant?

Response No. 06-25:

The comment largely repeats statements from Comment No. 06-24. Accordingly, CDFW refers the reader to **Response to Comment No. 06-24**. For additional responsive information, please see **Response to Comment Nos. 06-17, 06-18, and 06-21**.

Comment No. 06-26:

Any loss or habitat degradation of existing subpopulations should be considered significant. Also, there seems to be an old oil field or evidence that well operations were part of the land use patterns that could result in soil remediation with attendant large scale hydraulic modification to the drainage patterns.

Response No. 06-26:

The comment states that any loss or habitat degradation of existing spineflower populations should be considered significant. The comment also states that "there seems to be an old oil field or evidence that well operations were part of the land use patterns that could result in soil remediation with attendant large scale hydraulic modification to the drainage patterns."

First, as explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with the comment. The 2010 Final EIR disclosed all former and ongoing uses of the project site, including uses related to oil extraction. In addition, the 2010 Final EIR assessed impacts and mitigation associated with all project land uses. For these reasons, no further response is required.

Comment No. 06-27:

The landscape is heavily modified with an extensive network of roads and trails with the high potential to facilitate introduction of invasive, competitive non-native plants, where is the analysis of effects for this current habitat degradation and the future stability of the population.

Response No. 06-27:

The comment states that the "landscape is heavily modified with an extensive network of roads and trails with the high potential to facilitate introduction of invasive, competitive non-native plants, where is the analysis of effects for this current habitat degradation and the future stability of the [spineflower] population."

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on the spineflower are beyond the scope of the Draft AEA.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

Nonetheless, CDFW also does not concur with the comment. The 2010 Final EIR disclosed all former and ongoing uses of the project site, including the existing network of dirt roads and trails. In addition, the 2010 Final EIR assessed impacts and mitigation associated with all project land uses. For these reasons, no further response is required.

Comment No. 06-28:

There is no analyses regarding take of some of the occupied habitat by agricultural and grading activities at Newhall.

Response No. 06-28:

The comment states that the Draft AEA provides "no analyses [sic] regarding take of some of the occupied [spineflower] habitat by agricultural and grading activities at Newhall."

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459.) No further review is required or warranted.

CDFW does not concur with the comment. The 2010 Final EIR disclosed all former and ongoing uses of the project site, including the existing agriculture and project grading. In addition, the 2010 Final EIR assessed impacts and mitigation associated with all project land uses. For these reasons, no further response is required.

Comment No. 06-29:

Design and Adaptive management

The SCP is based on the rare plant preserve design. The development proximity to reserves will eliminate the natural functioning of the rare plant habitat. The needs of the development place hostile adjacent ecologic functions in close proximity to all portions of the existing occupied habitat of the spineflower. These post-development functions will require intensive, questionably successful on site management in perpetuity to prevent the adverse influences that are anticipated by the adaptive management program. CNPS does not believe that the preserve design that is directly connected to proposed open spaces can support landscape-level ecological functions and processes as stated in the proposed rule. Proximity of the adjacent open spaces do not ensure habitat values inherent in the existing coastal sage scrub habitat of the present Newhall Ranch population.

Response No. 06-29:

The comment expresses CNPS's opinions regarding the effectiveness of the SCP, including the SCP's spineflower preserve design.

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with the comment. In CDFW's scientific judgment as California's designated trustee agency for fish and wildlife, CDFW expects the spineflower preserve connections to the broader open space system to provide habitat connectivity so that the preserves continue to support the ecological functions and biological communities that are important for the spineflower to persist, including healthy populations of spineflower pollinators and seed dispersers within and around the preserves. The connections – especially those to the Santa Clara River corridor, which links six of the seven preserves – are also expected to support continued transfer of spineflower pollen and seed between preserves to whatever extent it occurs now, because the higher mobility pollinators and seed dispersers capable of traversing the distances between preserves will still be able to do so in the post-development condition. Scientific support for these expectations is presented the 2010 Final EIR, Section 4.5, Biological Resources; the SCP, and the spineflower ITP.

Comment No. 06-30:

Preserve design problems include the concept of population fluctuations within the preserve areas. This premise cannot predict future habitat function where the populations could have migrated beyond the borders of the preserve boundaries. This process has been documented in other attempts to design rare plant preserves in California. Future needs of the plant might not be available because the loss and modification of immediate adjacent habitats that would elevate the potential for extirpation and likely extinction.

Response No. 06-30:

The comment provides additional criticism of the SCP and preserve system.

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with the comment. Please refer to Response to Comment No. 06-29 for responsive information.

Comment No. 06-31:

This species has been observed for such a short amount of time that the ability to truly understand the footprint requirements of the plant remain largely unknown; to create such a small rare plant reserve has the potential to reduce long term success to maintain a viable population into the future.

Response No. 06-31:

The comment provides additional criticism of the SCP and preserve system.

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

Nonetheless, CDFW also does not concur with the comment. Multi-year focused surveys for special-status plants were conducted in the spring and summer by Dudek and FLx throughout the project area from 2001 to 2007. (See 2010 Final EIR, Section 4.5, Biological Resources, pp. 4.5-112-113.)

Comment No. 06-32:

Preserve designs are faulty in that they do not provide a large enough buffer to include the requirements for persistence of native ants or other ground nesting arthropods that might be critical to the functioning ecosystem needed for the SFVS. Pollinators of spineflower include at least six arthropod taxa, with two native ant species responsible as primary propagators for the plant.⁷

⁷ Jones, C. Eugene et al. "Reproductive Biology of the San Fernando Valley Spineflower, *Chorizanthe parryi* var. *Fernandina* (Polygonaceae)." *Madroño*, vol. 56, no. 1, 2009, pp. 23–42. www.jstor.org/stable/41425796.

Response No. 06-32:

The comment provides additional criticism of the SCP and preserve system, and focuses on buffer zones and protection of native pollinators of spineflower.

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with the comment. As stated, in CDFW's scientific judgment as California's designated trustee agency for fish and wildlife, CDFW expects the spineflower preserve connections to the broader open space system to provide habitat connectivity so that the preserves continue to support the ecological functions and biological communities that are important for the spineflower to persist, including healthy populations of spineflower pollinators and seed dispersers within and around the preserves. The connections – especially those to the Santa Clara River corridor, which links six of the seven preserves – are also expected to support continued transfer of spineflower pollen and seed between preserves to whatever extent it occurs now, because the higher mobility pollinators and seed dispersers capable of traversing the distances between preserves will still be able to do so in the post-development condition. Scientific support for these expectations is presented the 2010 Final EIR, Section 4.5, Biological Resources; the SCP; and the

spineflower ITP. In addition, the referenced documents extensively analyzed the role of pollinators and the need to protect them.

Comment No. 06-33:

The entire rare plant reserve design proposed requires that there will be an Argentine ant control program. Argentine ants around homes are a constant problem that homeowners have yet to successfully control. Almost all home invasions are modified through the use of chemicals and the scale of invasions needing controls will undoubtedly result in the application of some sort of chemicals at an unspecified scale that will have an unknown affect [sic] on the native species. That might be incompatible with adjacent residential neighborhoods. This is a forever management action proposed for fifty percent of the plant distribution.

Response No. 06-33:

The comment provides additional criticism of the SCP and preserve system, and focuses on the Plan's ability to control Argentine ant intrusion into the preserves.

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with the comment. As referenced above in **Response to Comment Nos. 06-21 and 06-23**, the 2010 Final EIR, Section 4.5, Biological Resources; the SCP; and the ITP, all evaluate Argentine ants and the means to control them. As stated above, in CDFW's scientific opinion, project design features, Argentine ant-specific mitigation measures, and habitat enhancement activities required by the spineflower ITP, can and will control encroachments into the preserves, and Argentine ants will not affect pollinators and seed dispersers to the extent that spineflower reproduction will be reduced. The incorporation of Argentine ant monitoring and management measures in to the spineflower ITP is further validated by the studies cited in the 2010 and other data.

Further, in CDFW's opinion, the project design features, the mitigation measures, management and monitoring, and the habitat enhancement activities required by the SCP can ameliorate potential adverse effects of Argentine ants on spineflower. That is, the combination of controlling encroachments and enhancing floral richness for spineflower pollinators will mitigate potential adverse effects of Argentine ants.

One key to controlling Argentine ant encroachments is to control the moisture regime in and adjacent to the preserves. The SCP and spineflower ITP require the project applicant to demonstrate that the post-construction hydrology of the preserve areas is not altered by developed land uses. The SCP and ITP specifically restrict routing of irrigation nuisance flows to prevent hydrologic impacts to the preserves, while also prohibiting an increase in the quantity or intensity of storm water runoff through the preserves due to development. (See SCP Section 9.2.7.) To comply with these requirements, all development areas (e.g., roads, building pads, parks) must be sloped away from the preserves. (See ITP Conditions of Approval 4.18-4.20 and associated ITP Implementation Plan Measures.) In addition, irrigation practices and planting palettes in areas adjacent to preserves will be limited by deed restrictions to those consistent with the ITP. (See ITP Condition 4.17 and Attachment 2.) Where these areas are subject to irrigation, such as modified fuel modification zones that include seasonal use of irrigation (during fall fire season), runoff will be captured in bench drains that are routed away from the preserves.

Regarding habitat restoration areas within the preserves, all restoration activities within the preserves must be conducted pursuant to a habitat restoration/enhancement plan approved prior to implementation by CDFW. (See SCP Section 9.2.1 0.) If irrigation is used in the restoration areas, it must not alter pre-existing hydrologic conditions within the preserve and must use drip irrigation to eliminate runoff. Temporary erosion control devices also may be used to prevent sedimentation and/or turbidity effects. With required review and

approval of the habitat restoration/enhancement plans, in combination with the SCP monitoring and reporting requirements, CDFW expects that authorized restoration activities will not alter natural hydrologic conditions within the preserves.

Comment No. 06-34:

These proposed controls for Argentine ant pose imminent threat to the entire Newhall spineflower population. The environmental effects proposed control program will be exacerbated by the introduction of myriad pesticides that will accompany the anthropogenic community of the proposed development that is Newhall Ranch. The control program for Argentine ant will destroy the populations of pollinators necessary for existence of the spineflower, thereby serve as a primary vehicle for the demise and eventual destruction of the entire Newhall spineflower population that comprises 50% of the documented plant.

Response No. 06-34:

The comment provides additional criticism of the SCP and preserve system. As in Comment No. 06-33, the comment focuses on the SCP's program to control Argentine ant intrusion into the spineflower preserves. CDFW does not concur with the comment. For responsive information, please see **Response to Comment Nos. 06-21, 06-23 and 06-33.**

Comment No. 06-35:

These proposals have never been tried, this action will affect fifty percent of the plants occupation in nature. The Argentine ant is listed as the most significant threat to the plant and yet the rare plant reserve design will place that threat in immediate proximity that will require attempts at potential control.

Response No. 06-35:

The comment provides additional criticism of the SCP and preserve system. The comment focuses on the SCP's program to control Argentine ant intrusion into the spineflower preserves, and expresses the opinion that control measures other than those set forth in the plan should be considered.

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with the comment. For responsive information, please see **Response to Comment Nos. 06-21, 06-23, and 06-33.**

Comment No. 06-36:

Stability and persistence of populations

After the take authorized for 25% of the occupied *Chorizanthe parryi* ssp. *fernandina* habitat, the remaining seventy five percent of the Newhall population is hypothesized to persist into the future in rare plant preserves. These preserves are designed with inadequate buffer distance and includes bordering land use that is expected to be occupied by the Argentine ant, probably the largest threat to the spineflower. The implementation of the preserve design requires immediate need for threat control of an invasive species that is an urban pest. Functionally, one half of the known distribution will be compromised.

Response No. 06-36:

The comment provides additional criticism of the SCP and preserve system. The comment focuses on the SCP's program to control Argentine ant intrusion into the spineflower preserves and the width of the buffers around the preserves.

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with the comment. For responsive information, please see **Response to Comment Nos. 06-21, 06-23, and 06-33**.

Comment No. 06-37:

The rare plant preserves are to be part of a land use designation of open space. Missing are descriptions of alternative outcomes for the utility of the open space design that is described as intending to maintain landscape level ecological functions. A definition of the word intended includes 'wished for'. Immediately following this hopeful statement is the disqualifying description that, "...human development would be adjacent to or border the majority of the preserves..." Landscape level periodic wildfires and high functioning predator prey interactions will not be possible. The rare plant preserves must have a large buffer surrounding the population footprint otherwise the long term natural survival of the spineflower is highly doubtful.

Response No. 06-37:

The comment provides additional criticism of the SCP and preserve design and focuses on the Plan's ability to maintain landscape level ecological function and the adequacy of the buffers around the spineflower preserves.

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with the comment. For responsive information, please see **Response to Comment Nos. 06-21, 06-22, 06-23, and 06-33**.

Comment No. 06-38:

Basically, the spineflower will be reduced to one single natural population with a horticultural experiment at Newhall. One glaring error in the experiment is that there is no plan if the SMP is unsuccessful. This furthermore exacerbates the threat of endangerment for the plant.

Response No. 06-38:

The comment provides additional criticism of the SCP and preserve design, and asserts that "the spineflower will be reduced to one single natural population with a horticultural experiment at Newhall." The comment also states that there is no plan if the SMP [which CDFW interprets to mean the SCP] is unsuccessful."

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with the comment. For responsive information, please see **Response to Comment Nos. 06-21, 06-23, and 06-33.**

Comment No. 06-39:

There is no information in the SMP on the ability to successfully minimize the effects of nonnative grasses through potential management actions. Potential, untried actions should not influence the current level of threat analysis.

Response No. 06-39:

The comment states that there is no information in SCP regarding the plan's ability "to successfully minimize the effects of nonnative grasses through potential management actions..." The comment also states that "[p]otential, untried actions should not influence the current level of threat analysis."

The comment provides additional criticism of the SCP, and focuses on the plan's ability to manage the threat posed by non-native plants species, namely non-native grasses. As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with the comment. For responsive information, please see **Response to Comment Nos. 06-20, 06-22, 06-23, and 06-33.**

Comment No. 06-40:

CNPS disagrees with the statement that Argentine ants can be effectively managed within and adjacent to the preserves through the use of adaptive management. There is no possible way to understand how the proposed severe habitat alteration will affect the biota into the future especially where such large ecosystem modifications will occur with the scale of development proposed for the immediate vicinity of the SFVS. The dismissal of the threat is premature and it is a major threat. The problem with adaptive management with such a small population is that there is no room for error correction, if the attempts to adapt management strategies fail, the plant is history. The incorporation of adaptive management objectives for a threat that will be introduced to the habitat of the spineflower, into the design of the rare plant preserve is a statement that the design is faulty. To be able to preserve rare elements and their habitats will require a much larger reserve than is proposed.

Response No. 06-40:

The comment expresses CNPS's opinion regarding the SCP's ability to effectively manage Argentine ants.

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with the comment. For responsive information, please see **Response to Comment Nos. 06-21, and 06-33 through 06-36.**

Comment No. 06-41:

The success or failure of the proposed Plan will require 25 or more years to determine. The use of positive outcomes of the Plan (enhancement and introduction) can only occur after a measured success. The effectiveness of proposed conservation measures cannot be evaluated for many years and any determination of spineflower vulnerability needs to be based on existing threats not a reliance on conjecture of potential future success.

Response No. 06-41:

The comment states that the “success or failure of the proposed Plan [the SCP] will require 25 or more years to determine.” The comment also states that the “effectiveness of proposed conservation measures “cannot be evaluated for many years and any determination of spineflower vulnerability needs to be based on existing threats not a reliance on conjecture of potential future success.”

The comment addressed the ultimate success of the SCP, and how that success can be effectively measured. As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project’s impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with the comment. The SCP and spineflower ITP assessed the success of the Plan, and, in CDFW’s opinion, the SCP’s mitigation strategy will minimize and fully mitigate the impacts of the authorized take and are capable of successful implementation.

Comment No. 06-42:

The reliance of adaptive management to successfully address severe habitat modification is premature. Deliberately placing potential avenues for Argentine ant invasions is inviting a high potential for failure. There needs to be a consideration that the reality is the project design and ongoing adaptive management will facilitate the loss of populations and viability of the proposed rare plant reserve complex. Especially when the adaptive management objectives include statements of ‘to the extent feasible,’ which is a mitigation condition at the heart of biodiversity decline worldwide.

Response No. 06-42:

The comment expresses CNPS’s opinion regarding the SCP’s ability to effectively manage Argentine ants.

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project’s impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with the comment. For responsive information, please see **Response to Comment Nos. 06-21, 06-33 through 06-36, and 06-41**.

Comment No. 06-43:

The conclusion is that proposed adaptive management strategies will allow actions that will severely modify the supporting ecosystem through habitat modification and isolation. In fact, the action of compromising one of the two populations automatically means that the species can never be protected or recovered and therefore is moved closer to extinction through potential stochastic elements.

Response No. 06-43:

The comment expresses CNPS's opinion that the SCP and its adaptive management strategies "will allow actions that will severely modify the supporting ecosystem through habitat modification and isolation." The comment also states that "the action of compromising one of the two populations automatically means that the species can never be protected or recovered and therefore is moved closer to extinction through potential stochastic elements."

The comment critiques the SCP and the ability of its adaptive management strategies to adequately protect the species from isolation and stochastic extinction. As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with CNPS's opinion. As stated above, in CDFW's scientific judgment as California's designated trustee agency for fish and wildlife, CDFW expects the spineflower preserve connections to the broader open space system to provide habitat connectivity so that the preserves continue to support the ecological functions and biological communities that are important for the spineflower to persist, including healthy populations of spineflower pollinators and seed dispersers within and around the preserves. The connections – especially those to the Santa Clara River corridor, which links six of the seven preserves – are also expected to support continued transfer of spineflower pollen and seed between preserves to whatever extent it occurs now, because the higher mobility pollinators and seed dispersers capable of traversing the distances between preserves will still be able to do so in the post-development condition. Scientific support for these expectations is presented the 2010 Final EIR, Section 4.5, Biological Resources; the SCP; and the spineflower ITP.

Comment No. 06-44:

Additional factors need to be considered within analysis of effects

Wildfire

Within the introduction to the five factors is the statement that wildfire is a threat to the spineflower. This statement appears to have no justification. It is possible that the elimination of periodic fires, a normal function of the landscape level ecological function, might be a threat that should be analyzed.

Response No. 06-44:

The comment states that the project and the SCP may eliminate periodic fires, which the comment describes as a "normal function of the landscape level ecological function [sic]." The comment then states that this is a threat that should be analyzed.

The comment critiques the SCP's potential to disrupt normal fire regimes and alleged failure to assess this impact as a threat to the species. As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with CNPS's opinion. For further responsive information, please see **Response to Comment No. 06-22**.

Comment No. 06-45:

Trespass

Adverse recreation through trespass into the rare plant reserves is highly likely, neighborhood dogs and cats are also a highly potential influence on landscape level ecosystem functions.

Response No. 06-45:

The comment states that recreational trespass into the spineflower preserves is highly likely, and that “neighborhood dogs and cats are also a highly potential influence on landscape level ecosystem functions.”

The comment raises issues regarding human and pet intrusion into the spineflower preserves. As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project’s impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with CNPS’s opinion. The 2010 Final EIR, Section 4.5, Biological Resources, identified increased human activity in open space areas of the project area as including potential unauthorized impacts, such as trespass or vandalism, as causing secondary impacts. The SCP and associated mitigation measures will require the installation of fencing and signage to minimize trespassing and trampling of spineflower populations. (See 2010 Final EIR, pp. 4.5-1771-1772.)

Comment No. 06-46:

Changes in predator populations

The isolation by urban development will change predator populations and control of rodents that could modify the functions of the rare plant reserve, through burrowing and grazing/browsing and type converting the ecosystem. This needs to be included in the analysis of effects to the plant.

Response No. 06-46:

The comment states that the “isolation by urban development will change predator populations and control of rodents that could modify the functions of the rare plant reserve, through burrowing and grazing/browsing and type converting the ecosystem.” The comment also states that these effects should be analyzed.

The comment addresses issues pertaining to the SCP and its ability to control impacts from predators and rodents that may “modify the functions of the rare plant reserve.” As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project’s impacts on spineflower, as reflected in the SCP and the Incidental Take Permit, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with CNPS’s opinion concerning “isolation by urban development.” Connectivity and isolation were topics that received extensive analysis in the 2010 Final EIR, Section 4.5, Biological Resources, the SCP, and the spineflower ITP. As stated above, in CDFW’s scientific judgment as California’s designated trustee agency for fish and wildlife, CDFW expects the spineflower preserve connections to the broader open space system to provide habitat connectivity so that the preserves continue to support the ecological functions and biological communities that are important for the spineflower to persist, including healthy populations of spineflower pollinators and seed dispersers within and around the preserves. The connections – especially those to the Santa Clara River corridor, which links six of the seven preserves – are

also expected to support continued transfer of spineflower pollen and seed between preserves to whatever extent it occurs now, because the higher mobility pollinators and seed dispersers capable of traversing the distances between preserves will still be able to do so in the post-development condition. Scientific support for these expectations is presented the 2010 Final EIR, Section 4.5, Biological Resources; the SCP; and the spineflower ITP.

Comment No. 06-47:

Effects of hydro-geological modifications inherent in the proposed development of Newhall Ranch

The earth-moving activities, changes in hydrology, in the contributing sub-watershed that services the existing habitat and spineflower population may have both short and long-term effects.

Response No. 06-47:

The comment states that “earth-moving activities, changes in hydrology, in the contributing sub-watershed that services the existing habitat and spineflower population may have both short and long-term effects.”

The comment addresses hydrological effects on the spineflower preserves to be established under the SCP. As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project’s impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with CNPS’s opinion as the SCP analyzed such effects, as did the 2010 Final EIR, Section 4.5, and the ITP. (See **Response to Comment No. 06-23**.) In addition, the comment does not point to any specific analysis in the 2010 Final EIR, the SCP, or the spineflower ITP that is inadequate, and, thus, a general response is appropriate.

Comment No. 06-48:

Pollinator sustainability

The proposed Argentine ant control program is diametric to the protections of the populations of existing documented arthropods responsible for servicing the viability of the spineflower.

Response No. 06-48:

The comment states that the SCP’s “[a]rgentine ant control program is diametric to the protections of the populations of existing documented arthropods responsible for servicing the viability of the spineflower.”

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project’s impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with CNPS’s opinion. For responsive information regarding Argentine ants see **Response to Comment Nos. 06-21, 06-33 through 06-36, and 06-41**.

Comment No. 06-49:

Conclusion

A high potential for the loss of the species exists with the Newhall spineflower population through inadequate rare plant reserve design and introduction of controls for the anticipated encroachment of Argentine ant. Twenty-five percent loss of the Newhall population projected due to externalities affecting the preserve is a significant portion of the spineflower range. Loss can effectively be 50% of the total documented plant population over time with the implementation of the proposed Argentine ant control program.

Response No. 06-49:

The comment repeats CNPS's opinion that the SCP and its preserve design will not adequately protect the plant from project-related impacts, including impacts from Argentine ants. The comment further states that such impacts may lead to the extinction of the species.

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with CNPS's opinion. As this comment represents statements in the conclusion of the comment letter, CDFW refers the reader to **Response to Comment Nos. 06-2 and 06-17 through 06-48**, above.

Comment No. 06-50:

There are only two populations of SFV spineflower. By that very fact stochastic threats to very small populations elevate the threat of extinction.

Response No. 06-50:

The comment states that there are "only two populations of SFV spineflower. By that very fact stochastic threats to very small populations elevate the threat of extinction."

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with CNPS's opinion. As this comment represents statements in the conclusion of the comment letter, CDFW refers the reader to **Response to Comment Nos. 06-2 and 06-17 through 06-48**, above.

Comment No. 06-51:

Based on the information above, we find the Spineflower Management Plan as proposed to be a death sentence to the existing Newhall population. It must be reconsidered and rewritten using better rare plant recovery science and planning methodology.

Response No. 06-51:

The comment expresses CNPS's opinion that "the Spineflower Management Plan as proposed to be a death sentence to the existing Newhall population." The comment also asks that the SCP "be reconsidered and rewritten using better rare plant recovery science and planning methodology."

As explained in **Response to Comment Nos. 06-2, 06-17, and 06-18**, above, project impacts on spineflower are beyond the scope of the Draft AEA, including the impacts and efficacy of the SCP preserve system.

Moreover, the project's impacts on spineflower, as reflected in the SCP and the ITP, were extensively analyzed in the 2010 Final EIR, and that analysis was upheld by the Court of Appeal in *CBD v. CDFW* (2016 Cal.App.5th 452, 459). No further review is required or warranted.

CDFW does not concur with CNPS's opinion. As this comment represents statements in the conclusion of the comment letter, CDFW refers the reader to **Response to Comment Nos. 06-2 and 06-17 through 06-48**, above.

07. Letter from Snowy Dodson, California Native Plant Society, dated February 6, 2017

Comment No. 07-1:

Attached is a letter from the Los Angeles/ Santa Monica Mountains Chapter of California Native Plant Society commenting on the Newhall Ranch Draft AEA.

Response No. 07-1:

The comment is an introduction to comments that follow. No further response is required.

Comment No. 07-2:

Thank you for giving us more time to study and respond to this draft AEA.

Response No. 07-2:

The comment expresses gratitude for the extension of the public comment period on the Draft AEA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the project.

Comment No. 07-3:

RE: Comments on Newhall Ranch Draft Additional Environmental Analysis (AEA)

California Native Plant Society has commented on previous documents pertaining to this development and instituted legal action based on insufficient protection for an endangered plant, *Chorizanthe parryi* var. *fernandina* and other concerns about loss of native plants that are locally rare or are protected oak species.

Response No. 07-3:

The comment provides background information regarding the CNPS's involvement in the review of environmental documentation previously prepared for the project, as well as its involvement in legal proceedings concerning endangered, rare and/or protected plant species. The comment, which will be included as part of the record and made available to the decision makers prior to a final decision on the project, does not raise any issue concerning the adequacy of the draft environmental document; therefore, no further response is required.

Comment No. 07-4:

We are concerned about the amount and effect of twelve years of grading and construction on both sides of the Santa Clara River, an SEA, the only free-flowing river in Los Angeles County. Native plant habitats, indeed the native ecosystems of the watershed, floodplain and the river itself may be irreparably harmed by this project. Air pollution will be a major problem for all.

Response No. 07-4:

The comment expresses general concerns regarding the environmental effects of construction activity on the Santa Clara River, including the River's native ecosystems, watershed and floodplain, as well as on air quality. This comment is beyond the scope of the AEA because it addresses aspects of the prior environmental analysis that were *not* found to be inadequate by the California Supreme Court. (See **Topical Response 1: Scope of the Additional Environmental Analysis** for related information.) Each of the environmental issues of concern mentioned in the comment were comprehensively studied and considered by CDFW in its 2010 Final EIR. Other than general assertions, the comment provides no evidentiary basis to support its conclusion.

Comment No. 07-5:

The Additional Environmental Analysis (AEA) through its omissions and inaccuracies, tends to support this conclusion.

Comments on specific sections of the AEA.

Response No. 07-5:

The comment is an introduction to comments that follow, and the referenced “omissions and inaccuracies” will be responded to, in turn, in the responses that follow. No further response is required.

Comment No. 07-6:

GHG Emissions Inventory (RMDP / SCP, Los Angeles County):

1) Table 2-10a: Number of Net New Trees is given as “Entrada Center (EC) 2,500 trees, Newhall Ranch Specific Plan (NRSP) 35,000 trees, and Valencia Commerce Center (VC) 5,000 trees. No tree species given, only “Miscellaneous tree types.” Since tree species vary considerably in their emissions of gases and in their ability to sequester Green House Gases (GHG) and since all these trees will be young and have no GHGs already sequestered, this table is totally useless in calculating total emissions or sequestering in the final vegetating of Mission Village.

Response No. 07-6:

The comment expresses a concern with the methodology used to estimate the change in carbon sequestration-related emissions that would result from the project’s alterations to the existing, on-site vegetation conditions, specifically focusing on the use of species-specific, tree-type data.⁴ In response, the methodology used in the Draft AEA follows widely-accepted guidance and relies on established data inputs.

The results of the carbon release/sequestration analysis reported in the Draft AEA were calculated using CalEEMod®, which follows IPCC guidelines. CalEEMod® provides a platform to calculate both construction emissions and operational emissions from a land use development project, and estimates one-time vegetation sequestration changes resulting from permanent changes to the existing site conditions and new tree plantings. This model was developed under the auspices of the SCAQMD, which is the air district with jurisdictional boundaries covering the project site, and received input from other California air districts, and is currently used by numerous lead agencies when quantifying the emissions associated with development projects undergoing environmental review. CalEEMod® uses widely-accepted models for emission estimates combined with appropriate default data that can be used if site-specific information is not available. CalEEMod® contains default values and existing regulation methodologies to use in each specific local air district region. Appropriate statewide default values can be used if regional default values are not defined. Ramboll Environ used default factors for the Los Angeles county area (within the SCAQMD jurisdiction) when preparing the GHG emission inventory, unless otherwise noted.

As described in Appendix A, Calculation Details for CalEEMod, of the CalEEMod® User’s Guide:

“The program calculates GHG emissions from vegetation activities of land use change and the planting of new trees according to the IPCC protocol for vegetation since it has default values that work well with the information typically available for development projects. This method is similar to the Climate Action Reserve (CAR) Forest Protocol⁵⁴ and the Center for Urban Forest Research Tree Carbon Calculator⁵⁵, but it has more general default values available that will generally apply to all areas of California without requiring detailed site-specific information⁵⁶.

⁵⁴ CCAR. 2007. Forest Sector Protocol Version 2.1. Available at:
http://www.climateregistry.org/resources/docs/protocols/industry/forest/forest_sector_protocol_version_2.1_sept2007.pdf

⁴ The comment refers specifically to the Mission Village project. For purposes of this response, however, it has been assumed that the comment was intended to apply to the RMDP/SCP Project.

⁵⁵ Available at <http://www.fs.fed.us/ccrc/topics/urban-forests/ctcc/>

⁵⁶ The CAR Forest Protocol and Urban Forest Research Tree Carbon Calculator are not used since their main focus is annual emissions for carbon offset considerations. As such they are designed to work with very specific details of the vegetation that is not available at a CEQA level of analysis.”⁵

CalEEMod[®] uses widely-accepted guidance and protocols to calculate carbon sequestration for new tree growth.⁶ Because trees are assumed to reach maturity in 20 years under IPCC guidelines and CalEEMod[®] calculation details,⁷ the Draft AEA’s analysis assumed 20 years of sequestration potential to estimate the total carbon sequestered over that time by the new vegetation. (As stated by IPCC, “the accumulation of carbon in biomass slows with age, and thus for trees greater than 20 years of age, increases in biomass carbon are assumed [to be] offset by losses from pruning and mortality.”⁸ IPCC’s position is also that, when trees and vegetation reach maturity (are “full grown”), there will be no further net carbon sequestration (i.e., the carbon released from dead biomass would be balanced with carbon sequestration from the growing biomass).⁹ Therefore, contrary to the comment’s suggestion, new trees actually have a greater potential to sequester carbon in the long term than those that have already reached maturity.

As to the mix of tree species assumed in the emissions analysis, the amount of CO₂ sequestered does depend on the type of tree. However, as described in CalEEMod[®] Appendix A, the vegetation calculation has “general default values available that will generally apply to all areas of California without requiring detailed site-specific information.”¹⁰ The analysis presented in the Draft AEA has assumed a broad species class of “Miscellaneous” for purpose of the carbon sequestration calculation. Miscellaneous is the “[a]verage of all other broad species classes. To be assumed if tree type is not known.”¹¹ In this case, and given the scale of the planned community, the specific tree types that will be used to landscape the project site cannot be reasonably determined and use of the “Miscellaneous” classification is appropriate.

In summary, the CalEEMod[®] platform is the best available modeling tool for use in estimating carbon sequestration-related emissions in CEQA context. The methodology uses default inputs from CalEEMod[®] that are intended to be generally applicable in the California region; thus, additional site-specific information only would serve to improve the calculated change in carbon sequestration and further reduce the project’s emissions inventory estimates.

Comment No. 07-7:

2) Table 2-10b: Vegetation Change Evaluation: This table lists Area, Type of Vegetation Change, Initial Acres, Final Acres and CO₂ Emissions.

a. Area: The total acreage covered is 5,495 acres (ES+ NRSP+VCC). Except for 130 acres described as “Agricultural, Developed or Disturbed,” the other 5,365 acres are completely denuded of vegetation during development of this project according to this table.

⁵ “Appendix A: Calculation Details for CalEEMod,” prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), p. 45, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2>, accessed on February 17, 2017.

⁶ “Appendix A: Calculation Details for CalEEMod,” prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), p. 47, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2>, accessed on February 17, 2017.

⁷ IPCC, “2006 IPCC Guidelines for National Greenhouse Gas Inventories” (2006), Volume 4: Agriculture, Forestry and Other Land Use, Chapter 2: Generic Methodologies Applicable to Multiple Land-Use Categories, pp. 2.13 and 2.25 to 2.26, available at http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/4_Volume4/V4_02_Ch2_Generic.pdf, accessed on February 17, 2017.

⁸ IPCC, “IPCC Good Practice Guidance for Land Use, Land-Use Change and Forestry” (2003), Appendix 3a.4, p. 3.298, available at http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf_files/Chp3/App_3a4_Settlements.pdf, accessed on February 17, 2017.

⁹ “Appendix A: Calculation Details for CalEEMod,” prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), p. 47, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2>, accessed on February 17, 2017.

¹⁰ “Appendix A: Calculation Details for CalEEMod,” prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), p. 45, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2>, accessed on February 17, 2017.

¹¹ “Appendix A: Calculation Details for CalEEMod,” prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), p. 48, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2>, accessed on February 17, 2017.

Response No. 07-7:

The comment restates information contained in the Draft AEA and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the project. No further response is required because the comment does not raise an environmental issue.

Comment No. 07-8:

What happened to the three San Fernando Valley Spineflower Preserves?

Response No. 07-8:

The comment inquires as to the representation of the spineflower preserve acreage in Table 2-10b of the Draft AEA Appendix 1. In response, please see Draft AEA Table 1.2-1, which provides – in Table Note 3 – that the project’s designated “Open Space” acreage includes the spineflower preserves. As the spineflower preserves would not be subject to disturbance-related activities during the project’s construction phase, and would instead be protected “Open Space,” the project would not result in any adverse changes to the carbon sequestration attributes of the subject acreage; therefore, Table 2-10b assigns no change in carbon sequestration to that acreage. Indeed, the continuing carbon sequestration potential of all of the project’s designated “Open Space” acreage conservatively was assumed to remain static in the GHG emissions analysis, even though some of that acreage will be subject to management and cultivation activities that serve to enhance the acreage’s carbon sequestration potential.

As a factual correction, please note that the project evaluated in this AEA, as approved by CDFW in 2010, includes a total of seven (not three) preserves for the San Fernando Valley spineflower. These seven preserves are located on approximately 226 acres. (See CDFW, CEQA Findings of Fact and Statement of Overriding Considerations, December 3, 2010, p. 6.)

Comment No. 07-9:

What happened to the mature native oaks and other native tree species protected by the Los Angeles County Tree Ordinance? Fifty-three protected/Heritage oaks were to be removed. What happened to the other native oaks and protected native trees?

Response No. 07-9:

Please see **Response to Comment No. 07-8** above; as explained therein, the GHG emissions analysis presented in Table 2-10b conservatively does not take credit for the continuing carbon sequestration potential of undisturbed acreage with existing vegetation, including oaks and other native tree species that are not part of the project’s disturbance area. This approach is consistent with CalEEMod®, which makes clear that one of the key inputs to the analysis is the area of land (i.e., the acreage) that is subject to the land use change: “The user must specify area of land in acres for specific final and initial land use types.”¹²

Also, as discussed in **Response to Comment No. 07-6** above, CalEEMod®’s vegetation calculation uses values that will generally apply to all areas of California without requiring detailed site-specific information regarding tree types. As such, Table 2-10b does not contain and does not need to contain a specific line item for oak trees that would be removed by the project.

Note that any project-related activities that remove or encroach upon oak trees located on the project site necessarily will occur in accordance with the County of Los Angeles’ oak tree ordinance. (See Los Angeles County Code, Title 22 [Planning and Zoning], Division 1, Chapter 22.56, Part 16 [Oak Tree Permits].) The

¹² “Appendix A: Calculation Details for CalEEMod,” prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), pp. 45 through 47, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2>, accessed on February 17, 2017.

necessary removal and/or encroachment permits will be secured as part of the village-level entitlement processes subject to the jurisdiction of the County of Los Angeles.

Comment No. 07-10:

What happened to the wetland habitats protecting locally rare or rare species of animals?

Response No. 07-10:

Please see **Response to Comment Nos. 07-8 and 07-9** above. As discussed therein, the carbon sequestration potential of undisturbed areas, including wetlands protected for the benefit of other biological resources, would not be adversely affected by the project. Consistent with the methodological framework set forth in CalEEMod®, the referenced wetland habitat acreage, which will continue to sequester carbon, conservatively is not reflected in Table 2-10b.

As for the comment regarding the impacts of the project on wetland habitats, the comment is beyond the scope of this AEA because it addresses aspects of the prior environmental analysis that were *not* found to be inadequate by the California Supreme Court. (See **Topical Response 1: Scope of the Additional Environmental Analysis** for related information.) Impacts to wetland habitats, and the derivative impacts to rare animals, previously were studied and considered by CDFW in Section 4.5, Biological Resources, of the 2010 Final EIR; but, as indicated, that analysis was not found deficient by the courts.

Comment No. 07-11:

2) Table 2-10b: Vegetation Change Evaluation (continued):

b. Type of Vegetation Change: This section of the table lists types of vegetation so general as to be absolutely useless in determining what the sequestering histories of the plants in these “Types of Vegetation” were or what the actual GHG emissions (in metric tons) were for the lifetimes of those plants? or per year?. This section does not specify whether the metric tonnages of emissions were for one year or for the lifetimes of each species of plant in each of the “types” which are described as: Cropland, Grassland, Trees, Agriculture, Developed or Disturbed, Bog and Marsh, Broad Leaf and Upland Trees, Grass and Herbs, Riparian and Bottomland, Scrub and Chaparral.

Response No. 07-11:

The comment objects to the presentation of data in Table 2-10b of Draft AEA Appendix 1, opining that the vegetation type categories are too general and preclude an assessment of the “sequestering histories of the plants.” Please see **Response to Comment No. 07-6**, above, for information regarding the Draft AEA’s use of CalEEMod® to estimate the subject GHG emissions.

The CalEEMod® modeling platform adheres to published guidance on how the loss of carbon sequestration should be estimated upon the removal of existing vegetation. More specifically, CalEEMod® uses default CO₂ sequestration values from CAR¹³ for each vegetation type that will be preserved or created. There are four main vegetation types used within CalEEMod®: Forest Land (scrub and trees), Cropland, Grassland and Wetlands.¹⁴ Existing vegetation on the project site, as listed in Table 2-10b of the Draft AEA Appendix 1, was mapped to the most relevant CalEEMod® category.¹⁵ Agricultural, developed or disturbed vegetation was categorized as Croplands; Bog and Marsh was classified as Wetlands; Grass and Herbs was classified as Grasslands; Scrub and Chaparral was classified as Forestland – Scrub; and, Broadleaf Upland Trees and Riparian and Bottomland were classified as Forestland - Trees. Thus, contrary to the comment and for

¹³ CCAR. 2007. Forest Sector Protocol Version 2.1. September. Available at: <http://www.climateactionreserve.org/how/protocols/forest/dev/version-2-1/>, accessed on February 17, 2017.

¹⁴ “Appendix A: Calculation Details for CalEEMod,” prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), p. 46, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2>, accessed on February 17, 2017.

¹⁵ As mentioned in Note 1 in Table 2-10b, the information for existing vegetation types was based on the vegetation change inputs used in the Project’s 2010 Final EIR.

purposes of GHG emissions estimation, all existing vegetation on the project site is correctly classified into one of these four categories to estimate the sequestration-related emission change.

In accordance with the IPCC guidelines,¹⁶ the total amount of carbon released from the project's vegetation removal activities is calculated based on the assumption that the existing vegetation becomes DOM upon removal during the site preparation phase. Therefore, the 70,149 MT CO₂e identified in Draft AEA Table 2.3-2, Vegetation Change Evaluation, is the carbon released as estimated by converting the DOM biomass from the existing vegetation to CO₂e emissions in accordance with the IPCC guidelines. (See Draft AEA Appendix 1, Section 2.2.2 and Table 2-10b.) The estimated 70,149 MT CO₂e is the one-time release of GHG emissions from removed vegetation biomass; it is *not* assumed that the vegetation can absorb more CO₂e each year if it remains in place. IPCC's position is also that, when trees and vegetation reach maturity (are "full grown"), there will be no further net carbon sequestration (i.e., the carbon released from dead biomass would be balanced with carbon sequestration from the growing biomass).¹⁷

Comment No. 07-12:

At this point, it must be pointed out that CDFW has a major reference source available to all its staff entitled Manual of California Vegetation written by one of the top staffers in CDFW, a famous professor at Humboldt State University, and a vegetation expert on the state staff of CNPS. The book is in its second edition and covers site-evaluated vegetation alliances from all over California. It took years to gather the field information, analyze it and write the Manual of California Vegetation. To see a footnote to Table 2-10b stating that "Two sets of tree land use change were modeled, based on the land designations of 'Broad Leaf Upland' and 'Riparian and Bottomland' for the CDFW Draft Joint EIS/EIR is inexcusable. What sets of tree land use were used? New England maple trees? Florida cypress?."

Response No. 07-12:

The comment references the Manual of California Vegetation, implying that it should have been used during preparation of the Draft AEA's GHG emissions analysis. The comment then refers to Note 3 in Table 2-10b of the Draft AEA Appendix 1, making further inquiries regarding the species-specific tree types used in the analysis. Please see **Response to Comment No. 07-6**, above, for information regarding the Draft AEA's use of CalEEMod® to estimate the subject GHG emissions.

As mentioned in Note 1 in Table 2-10b, the information for existing vegetation types was based on the vegetation change inputs used in the project's 2010 Final EIR (see ENVIRON International Corporation, Climate Change Technical Report [February 2009] therein.) Table 4-2-B of the 2009 Climate Change Technical Report therein identified two types of existing trees as occurring on the project site: Broad Leaf Upland and Riparian and Bottomland. For GHG emissions estimation purposes, CalEEMod® does not differentiate between types of trees within the Forest Land category; the modeling platform assigns a singular, default CO₂ accumulation per acre data point to trees per the parameters set forth in the CAR's Forest Sector Protocol.¹⁸

As to the comment's reference to the Manual of California Vegetation, the manual contains information regarding over 450 different types of vegetation and is based on extensive surveying, data collection, analysis, description and mapping of vegetation. Along with a detailed description of different plant species, the manual also lists information regarding life history strategies, quantitatively-based rules to distinguish between types of vegetation, remarks on plant taxonomy, fire characteristics and other natural processes that shape the ecology of each type, and regional distribution information. Based on a review of the manual,

¹⁶ IPCC, "2006 IPCC Guidelines for National Greenhouse Gas Inventories" (2006), Volume 4: Agriculture, Forestry and Other Land Use, Chapter 2: Generic Methodologies Applicable to Multiple Land-Use Categories, p. 2.25, available at http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/4_Volume4/V4_02_Ch2_Generic.pdf, accessed on February 17, 2017.

¹⁷ "Appendix A: Calculation Details for CalEEMod," prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), p. 47, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2>, accessed on February 17, 2017.

¹⁸ "Appendix A: Calculation Details for CalEEMod," prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), p. 46, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2>, accessed on February 17, 2017.

it does not appear to address carbon sequestration and does not provide information that is relevant to the estimation of GHG emissions within the CalEEMod® modeling platform.

Comment No. 07-13:

The Manual of California Vegetation lists hundreds of vegetation alliances with lists of species. The Manual covers the species and describes their alliances for the areas of this proposed development.

Why wasn't this valuable reference used?

Response No. 07-13:

The comment asks why the Manual of California Vegetation was not used in the Draft AEA's GHG emissions analysis. Please see **Response to Comment No. 07-12** above for responsive information. As explained therein, the manual does not contain information that is germane to the emissions estimation processes completed by CalEEMod®. Identifying and classifying actual existing trees would not change the CalEEMod® output, as the modeling platform does not differentiate between the types of trees being removed and uses the same CO₂ accumulation per acre factor for all tree types in California.

Comment No. 07-14:

The main assumptions of this table appears to be that none of the native or non-native vegetation sequestered or was sequestering any carbon and that all the hundreds of plant species on this acreage emitted GHG. This is totally false.

Response No. 07-14:

The comment states that the "main assumptions" of Table 2-10b are that none of the existing vegetation on the project site is sequestering carbon. However, as explained in **Response to Comment No. 07-11**, the emissions estimation methodology used in CalEEMod® quantifies the release of carbon from existing vegetation as it becomes DOM upon its removal during the site preparation phase. The DOM accounts for the carbon sequestered by the existing vegetation upon its removal, as the modeling platform estimates the mass of sequestered CO₂ in the existing vegetation on a per unit area (as measured in acreage).¹⁹

Comment No. 07-15:

The last lines of this table are that "Net New Trees will sequester 30,000 metric tons (MT) in their 20-year growth period (not a scientifically supported number), while the vegetation that had been removed had emitted 70,149 MT (not a scientifically supported number), so, guess what? That leaves 40,000 MT, which amortized over 30 years comes to a net emission of 1,335 MT/year, apparently a safe number of GHG emissions. What are the species of trees? What is the rate of sequestration of carbon of each species? What is the expected life span of each tree species? Some of the trees are supposed to be replacements for the oaks being bulldozed. Oaks live long lives and do sequester carbon quite well, though at different rates depending on weather changes. What is the effect of drought on the ability of any tree species to sequester carbon?

Response No. 07-15:

The comment reiterates various questions and concerns previously responded to in **Responses to Comment Nos. 07-6 through 07-14**; please refer to those responses. As explained in those responses, the Draft AEA's GHG emissions analysis uses the CalEEMod® modeling platform, which is the "industry standard" modeling platform for purposes of estimating GHG emissions for CEQA analysis. CalEEMod® is based on widely-accepted guidance and protocols, and calculates the release of sequestered carbon from existing vegetation that is removed due to land disturbance and the sequestration of additional carbon due to new tree

¹⁹ "Appendix A: Calculation Details for CalEEMod," prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), p. 45, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendix.pdf?sfvrsn=2>, accessed on February 17, 2017.

growth.²⁰ The comment speculates as to the perceived shortcomings in CalEEMod®, and provides no evidence to support its general assertions.

As additional background, one-time emissions from vegetation removal were amortized over 30 years per guidance from SCAQMD, which recommends using 30 years when analyzing one-time emissions.²¹ Further, information regarding the total life span of trees is not required in this analysis. As noted above, per IPCC guidelines, when trees and vegetation reach maturity (aka, are “full grown”), there will be no further net carbon sequestration (i.e., the carbon released from dead biomass would be balanced with carbon sequestration from the growing biomass). Therefore, in accordance with the IPCC guidelines, this analysis only estimates sequestration during the 20-year growing period for new trees.

Finally, droughts will affect different tree species at different rates and to different degrees. Immediate effects of a soil water deficit can include wilting, scorch, defoliation, irreversible shrinkage of cell membranes, and increased abscisic acid in trees. These immediate effects can halt growth and inhibit future growth if irreversible damage occurs. Long-term effects can include branch dieback and even plant death. Secondary effects of drought include an increased susceptibility to diseases, which also stunt growth.²²

A tree’s ability to sequester carbon is tied to its health and growth. A growing tree continues to capture carbon as it increases in organic matter both above and below ground. Trees also release stored carbon when they decompose.²³ Droughts do have the ability to limit carbon sequestration in trees, but droughts themselves are cyclical. Wet periods between droughts allow soil water levels to rise and give trees a chance to grow and sequester carbon.²⁴ For example, the recent 2016/2017 winter season has included significant levels of rainfall, recharging many of California’s reservoirs and providing trees with plentiful water. Because of the cyclical nature of California’s drought conditions, it would be incorrect to use drought-specific information when calculating the sequestration potential of trees in California.

In summary, the comment incorrectly and without evidentiary support concludes that the analysis is full of erroneous assumptions and inaccurate information. As explained, the methodology used in CalEEMod® relies on GHG emissions inputs and factors that are intended to be generally applicable in the California region.

Comment No. 07-16:

The Vegetation Change Evaluation table is full of erroneous assumptions, inaccurate information and is generally useless.

Response No. 07-16:

This comment generically concludes that Table 2-10b of the Draft AEA Appendix 1 is “useless.” The comment does not provide any additional evidence or information regarding the perceived shortcomings in the Draft AEA’s vegetation change evaluation. Please see **Responses to Comment Nos. 07-6 and 07-15** above for information substantiating the analysis provided in the Draft AEA.

²⁰ “Appendix A: Calculation Details for CalEEMod,” prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), pp. 45-48, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2>, accessed on February 17, 2017.

²¹ SCAQMD. 2009. Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13. August. Available online at: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-13/ghg-meeting-13-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-13/ghg-meeting-13-minutes.pdf)

²² Kujawski, Ron. September 2011. Long-term Drought Effects on Trees and Shrubs. The Center for Agriculture, Food and the Environment. UMass Amherst. Available at: <https://ag.umass.edu/landscape/fact-sheets/long-term-drought-effects-on-trees-shrubs>. Accessed on March 14, 2017.

²³ Northern Institute of Applied Climate Science. January 2017. Carbon Sequestration. US Department of Agriculture Forest Service. Available at: https://www.nrs.fs.fed.us/niacs/carbon/forests/carbon_sequestration/. Accessed on March 14, 2017.

²⁴ California Department of Water Resources. February 2015. California’s Most Significant Droughts: Comparing Historical and Recent Conditions. State of California. Available at: http://www.water.ca.gov/waterconditions/docs/California_Significant_Droughts_2015_small.pdf. Accessed on March 14, 2017.

Comment No. 07-17:

One factor missing in this discussion of vegetation is:

What happens to all the green waste and woody waste bulldozed on all this acreage? This represents many tons of organic material that must be taken somewhere for processing. CalRecycle does not permit organic waste to be landfilled, so the material must go to locations where it can be mulched, chipped and ground, and/or composted. Chiquita Canyon Landfill, located on the north side of the Santa Clara River not far from this development, is seeking an extension and modification of its land use permit so it can continue in operation for years. Part of its application is to establish an area for organic processing. So, if Chiquita Canyon Landfill gets a new CUP, all the many tons of green waste and woody waste from this 12-year project can be trucked across the Santa Clara River to Chiquita Canyon.

Response No. 07-17:

The comment expresses concern regarding the disposal method of green waste and woody waste that may be generated during project construction. This comment is beyond the scope of the AEA because it addresses aspects of the prior environmental analysis that were *not* found to be inadequate by the California Supreme Court. (See **Topical Response 1: Scope of the Additional Environmental Analysis** for related information.) The issue of solid waste disposal previously was studied and considered by CDFW in Section 4.20, Solid Waste Services, the 2010 Final EIR; but, as indicated, that analysis was not found deficient by the courts.

The Draft AEA's GHG emissions analysis accounts for the hauling of the green waste to off-site locations. Specifically, these hauling trips are accounted for using CalEEMod®. As discussed in the **Response to Comment No. 07-6**, CalEEMod® uses widely accepted methodologies for emission estimates combined with appropriate default data that can be used if site-specific information is not available. Site-specific information was used to estimate total haul truck trips for vegetation waste during the construction phase's site preparation activities. These trips are shown in Table 2-5 of the Draft AEA Appendix 1, and corresponding emissions associated with these trips were calculated based on the CalEEMod® default hauling trip length of 20 miles. The Chiquita Canyon Landfill, which is referenced in the comment, is located within 5 miles of the project site. Therefore, to the extent that the project's green waste ultimately is disposed of at the Chiquita Canyon Landfill, the Draft AEA's use of a 20-mile trip length is overly conservative. As such, the GHG emissions analysis accounts for this aspect of vegetation removal.

Also of note, there are various regulations that govern how organic waste and green waste is handled. The project will comply with these requirements, where applicable, to prevent improper handling of organic and green waste.

- ▲ AB 341: California's 75-Percent "Recycling" Goal – This bill establishes a goal that no less than 75 percent of solid waste generated in the state will be reduced, recycled, or composted by 2020. One of the specific focus areas related to green waste and woody waste is a goal of moving organics out of the landfill.
- ▲ AB 1594: Williams, Waste Management – This bill mandates that the use of green waste as alternative daily cover (ADC) at landfills will no longer be considered diversion for recycling, but will be treated as disposal beginning on January 1, 2020.
- ▲ AB 1826: California Organics Recycling – This bill requires mandatory recycling of organic waste by businesses that generate more than 4 cubic yards per week as of January 1, 2017 (this limit decreases to 2 cubic yards per week for certain cases as of January 1, 2020).
- ▲ Santa Clarita Valley Area Plan: One Valley One Vision 2012 (Area Plan) – The Area Plan includes relevant policies that encourage the composting of green waste and need for composting facilities.

- ▲ SCAQMD Rule 1133.3: Greenwaste Composting Facilities – Any green waste composting facility within the SCAQMD jurisdiction is potentially subject to Rule 1133.3, which focuses on emissions reductions from green waste composting operations. This rule is focused on reducing volatile organic compounds (VOCs) and ammonia, and contains handling requirements, such as limiting the amount of time green waste that can be stored at the facility before being composted.
- ▲ County of Los Angeles Construction and Demolition Debris Recycling and Reuse Ordinance – This ordinance requires that at least 50 percent of all project construction and demolition debris, which is defined to include vegetative matter, be recycled or reused. The requirements of this ordinance are set forth in Chapter 20.87 of Title 20 (Utilities) of the Los Angeles County Code.

Comment No. 07-18:

That means that all that organic waste will be nearby, emitting methane, carbon oxides, NO_xs and SO_xs as it awaits processing and some final destination, if different than Chiquita Canyon. Processed organic wastes have to meet health standards before they can be sold commercially. Those metric tonnages per year were not considered at all in this vegetation evaluation.

Response No. 07-18:

The comment states that the methane and CO₂ emissions from the dead organics wastes are not included in the Draft AEA's GHG emissions analysis. However, as described in **Responses to Comment Nos. 07-10 and 07-11**, the total amount of carbon released from the project's vegetation removal activities is calculated based on the assumption that the existing vegetation becomes DOM during the site preparation phase. Therefore, the 70,149 MT CO_{2e} identified in Draft AEA Table 2.3-2, Vegetation Change Evaluation, is the carbon released as estimated by converting the DOM biomass from the existing vegetation to CO_{2e} emissions in accordance with the IPCC guidelines.

The comment also refers to nitrogen oxides (NO_x) and sulfur oxides (SO_x) emissions from DOM, as well as the health standards to be met by organic wastes. This comment is beyond the scope of the AEA because it addresses aspects of the prior environmental analysis that were *not* found to be inadequate by the California Supreme Court. (See **Topical Response 1: Scope of the Additional Environmental Analysis** for related information.) The issue of air quality previously was studied and considered by CDFW in Section 4.7, Air Quality, the 2010 Final EIR; but, as indicated, that analysis was not found deficient by the courts. Additionally, it is noted that the air quality implications and corresponding health effects of green waste processing facilities, including the compliance of such facilities with applicable legal standards, necessarily would be addressed in the environmental review required for the permitting of such facilities. The subject project would result in the development of a master-planned community, not the construction and operation of a green waste processing facility.

Comment No. 07-19:

A suggestion to improve the project design, cut back on GHGs and save water is to cut back on grading and installation of storm drains on the project slopes.

Response No. 07-19:

The comment suggests that the project reduce the amount of grading and storm drain installation to reduce GHG emissions and save water. Because the project, with implementation of the recommended mitigation framework, will achieve net zero GHG emissions, no further design or mitigation strategies for the reduction of GHG emissions are needed. (The GHG emissions associated with the supply, distribution, and treatment of project-related water are captured by CalEEMod®.)²⁵ It also is noted that CDFW previously considered a range of alternatives to the project, many of which would reduce the amount of on-site grading. The analysis

²⁵ "Appendix A: Calculation Details for CalEEMod," prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), p. 33, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2>, accessed on February 17, 2017.

of alternatives was raised in the underlying proceedings, but not found inadequate by the California Supreme Court.

Additionally, the subject of water conservation is beyond the scope of the AEA because it addresses aspects of the prior environmental analysis that were not found to be inadequate by the California Supreme Court. (See **Topical Response 1: Scope of the Additional Environmental Analysis** for related information.) The issue of water supply previously was studied and considered by CDFW. (See Section 4.3, Water Resources, in the 2010 Final EIR.) As indicated, that analysis was not found deficient by the California Supreme Court.

Comment No. 07-20:

It is a waste of rainwater and a loss of groundwater to bulldoze deep ditches in the current natural drainages and install large storm drains to channel water into the Santa Clara River, where it eventually goes to the ocean. A storm drain system will cause major erosion to the floodplain and natural habitats along the Santa Clara River.

Response No. 07-20:

The comment states that the project's storm drain system will result in erosion in the floodplain and damage natural habitats located along the Santa Clara River. The comment is beyond the scope of the AEA because it addresses aspects of the prior environmental analysis that were *not* found to be inadequate by the California Supreme Court. (See **Topical Response 1: Scope of the Additional Environmental Analysis** for related information.) The issues of erosion, floodplain and biological resources previously were studied and considered by CDFW. (See Section 4.1, Surface Water Hydrology and Flood Control; Section 4.2, Geomorphology and Riparian Resources; Section 4.5, Biological Resources; and Section 4.6, Jurisdictional Waters and Streams in the 2010 Final EIR.) While raised in the underlying proceedings, that analysis was not found deficient by the California Supreme Court.

Comment No. 07-21:

Usually natural drainages follow bedrock formations, so, in times of chaotic and frequent rainstorms, the slopes become saturated down to bedrock, the bedrock gets slippery and heavy wet soils turn into dangerous mudslides. The force and speed of these mudslides can choke storm drains and even rip them out of the ground. The Council for Watershed Health and the Metropolitan Water District have developed projects in some areas that use the streets and adjoining landscaping as a system to slow down rapidly moving water and to capture it in swales and basins.

If this were done in the Mission Village project, GHGs from construction of large storm drain systems would be cut drastically.

Response No. 07-21:

The comment recommends that streets and adjoining landscaping be used to slow down and capture precipitation flows, in lieu of storm drain systems.²⁶ Please see **Response to Comment No. 07-20** for information that is responsive to this comment. As explained in that response, this comment raises an issue that is beyond the scope of the AEA. It also will be noted that the project uses a suite of Low Impact Development (LID) standards – in accordance with Chapter 12.84 of Title 12 (Environmental Protection) of the Los Angeles County Code – to capture stormwater in swales and basins, thereby allowing for recharge and percolation, as discussed in Section 4.4, Water Quality, of the 2010 Final EIR.

Comment No. 07-22:

The water captured would be used to irrigate landscaping, recharge groundwater and protect the Santa Clara River ecosystems from serious erosion.

²⁶ The comment refers specifically to the Mission Village project. For purposes of this response, however, it has been assumed that the comment was intended to apply to the RMDP/SCP Project.

Response No. 07-22:

The comment describes beneficial uses of captured stormwater. Please see **Response to Comment No. 07-20** for information that is responsive to this comment. As explained in that response, this comment raises an issue that is beyond the scope of the AEA. That being said, as referenced in **Response to Comment No. 07-21**, the project will use LID standards that will serve to minimize stormwater runoff, thereby providing opportunity for groundwater recharge and prevention against erosion. The project also will use recycled water from the Newhall Ranch Water Reclamation Plant (WRP) and existing, upstream WRPs as a non-potable water source to irrigate, for example, landscaped areas on the project site.

Comment No. 07-23:

Conclusion:

None of the tables in this AEA present realistic scenarios, unless one looks carefully at what is not said.

Response No. 07-23:

The comment, without supporting evidence or citation, states that none of the tables contained in the Draft AEA “present realistic scenarios.” Please see **Responses to Comment Nos. 07-6 through 07-18** for information responsive to prior comments presented in the letter regarding the GHG emissions estimation. Because the comment does not identify any specific concern, no further response can be provided or is required.

Comment No. 07-24:

The air pollution including particulate matter will be bad for twelve years. There is grading every year, which means particulate matter will be coating everything, including vegetation, making it difficult for plants to grow and plant eaters to survive. Twelve years is a long enough time to cause irreversible losses to both plant and animal species.

Response No. 07-24:

This comment is beyond the scope of the AEA because it addresses aspects of the prior environmental analysis that were not found to be inadequate by the California Supreme Court. (See **Topical Response 1: Scope of the Additional Environmental Analysis** for related information.) The issue of air quality and its effects on biological resources previously was studied and considered by CDFW (See Section 4.5, Biological Resources, and Section 4.7, Air Quality) in the 2010 Final EIR. As indicated, that analysis was not found deficient by the courts.

Comment No. 07-25:

As noted above, the model used for computing GHG emissions is inadequate.

Response No. 07-25:

The comment reiterates a general conclusion that the GHG emissions estimation is inadequate. As the comment does not raise any specific issue, no further response can be provided or is required. (See **Responses to Comment Nos. 07-6 through 07-18** for information responsive to prior comments presented in the letter regarding the GHG emissions estimation.)

Comment No. 07-26:

We cannot support approval of this draft AEA. It needs serious reworking.

Response No. 07-26:

The comment expresses general opposition to the analysis presented in the AEA. The comment is acknowledged and will be included as part of the record and made available to the decision makers prior to a final decision on the project.

08. Letter from Janet Cobb, Executive Officer, California Oaks, e-mail dated February 13, 2017; letter dated January 28, 2017

Comment No. 08-1:

Please find attached comments from California Oaks on the Newhall Ranch Draft AEA.

Response No. 08-1:

The comment is an introduction to comments that follow. No further response is required.

Comment No. 08-2:

California Oaks appreciates the opportunity to submit Newhall Ranch AEA comments.

Response No. 08-2:

The comment expresses gratitude for the opportunity to submit comments on the Draft AEA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the project. No further response is required.

Comment No. 08-3:

We incorporate herein the California Environmental Quality Act (CEQA) forest land conversion greenhouse gas (GHG) biogenic emission comments submitted by the California Oak Foundation dated July 8, 2010 (Exhibit A).

Response No. 08-3:

The comment incorporates a comment letter previously submitted by the commenter on the RMDP/SCP Project. As part of the project's 2010 Final EIR, CDFW previously responded to these comments. (See responses to Letter F21 in the 2010 Final EIR.)

Comment No. 08-4:

The 2008 California Air Resources Board's AB 32 Scoping Plan (2008 Scoping Plan) recognized the significant contribution that terrestrial greenhouse gas storage will make in meeting the state's GHG emissions reduction goals: "This plan also acknowledges the important role of terrestrial sequestration in our forests, rangelands, wetlands, and other land resources." When these natural resources are impacted due to land use change potentially five GHGs are directly or indirectly¹ released into the atmosphere.

¹ CEQA recognizes these secondary GHG biogenic emissions in the indirect effects language of Guidelines Section 15358(2), "...are later in time or farther removed in distance, but are still reasonably foreseeable."

Response No. 08-4:

The comment, which does not directly raise an issue regarding the adequacy of the AEA, provides background information for more specific issues that are raised in later comments. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the project. No further response is required. That being said, it is noted that the project would include more than 10,800 acres of open space (see Draft AEA Table 1.2-1), the retention of which is consistent with CARB's recognition of the importance of land preservation.

Comment No. 08-5:

Review of the AEA finds that the project fails to comprehensively analyze or feasibly and proportionally mitigate terrestrial conversion vegetation and soil organic carbon direct/indirect GHG emissions pursuant to CEQA requirements. Specifically, the failure to fully account for the foreseeable carbon dioxide (CO₂)

methane (CH₄), nitrous oxide (N₂O), black carbon and hydrofluorocarbon emission effects due to biomass disposal decomposition, combustion and transportation, and the soil CO₂ emissions associated with ground disturbing activities.

Response No. 08-5:

The comment generally states that the Draft AEA fails to comprehensively analyze or feasibly and proportionally mitigate the project's GHG emissions from vegetation changes and ground disturbing activities. Please see the responses to comments that follow for information that is responsive to the more specific comments that are advanced in support of this general statement.

Additionally, the comment does not provide any evidence of a deficiency in the Draft AEA's GHG emissions analysis or explain why such information is needed for purposes of calculating the project's GHG emissions under CEQA. As discussed in **Response to Comment Nos. 08-5 and 09-11**, CalEEMod[®] is recommended by SCAQMD for analyzing GHG emissions under CEQA and is widely used by CEQA lead agencies, including Los Angeles County. For purposes of the AEA's GHG analysis, reliance on CalEEMod[®] to estimate construction-related GHG emissions satisfies CEQA Guidelines Section 15064.4(a)(1), which allows a lead agency to select the model and methodology it considers most appropriate for the analysis, even if the model or methodology may have some limitations.

This comment and many (if not all) of those that follow in this comment letter raise issues that have not changed since the 2010 Final EIR. Indeed, many of the comments advanced in this comment letter repeat arguments presented by the commenter in the underlying proceedings, all of which were considered and responded to by CDFW in the 2010 Final EIR. As the 2010 Final EIR was upheld as compliant with CEQA on all grounds except for the two issues being addressed by the AEA, the comments raised in this letter are beyond the scope of the AEA. (See **Topical Response 1: Scope of the Additional Environmental Analysis.**) Because this comment is beyond the scope of the AEA, no additional response is needed. However, for informational purposes, the following discussion is provided.

To begin, the comment mentions that the emissions related to biomass decomposition and transportation were not fully accounted for in the Draft AEA. However, the Draft AEA accounts for GHG emissions attributable to biomass decomposition and the transportation of vegetation waste. Biomass combustion is a particular process that is not subject to the control of the project; this is discussed further below.

As described in the subsequent comments, the Draft AEA follows the widely-accepted CalEEMod[®] methodology, the industry standard for GHG emissions estimates for CEQA projects. CalEEMod[®] (and, by extension, the Draft AEA) follows published guidance on how the loss of carbon sequestration should be estimated upon the removal of existing vegetation. In accordance with IPCC guidelines,²⁷ the total amount of carbon released from the project's vegetation removal activities is calculated based on the assumption that the existing vegetation becomes DOM upon removal during the site preparation phase. Therefore, the 70,149 MT CO_{2e} identified in Draft AEA Table 2.3-2, Vegetation Change Evaluation, is the carbon released as estimated by converting the DOM biomass from the existing vegetation to CO_{2e} emissions in accordance with the IPCC guidelines. (See Draft AEA Appendix 1, Section 2.2.2 and Table 2-10b.) The estimated 70,149 MT CO_{2e} is the one-time release of GHG emissions from removed vegetation biomass; it is not assumed that the vegetation can absorb more CO_{2e} each year if it remains in place. The carbon fraction in plant material is assumed to be 0.47 per IPCC data and the carbon is assumed to be converted to CO₂.²⁸ CalEEMod[®] does not estimate any other GHGs (CH₄ [methane], hydrofluocarbons, etc.) from biomass decomposition. Thus, the emissions from biomass decomposition are estimated correctly using an established methodology.

²⁷ IPCC, "2006 IPCC Guidelines for National Greenhouse Gas Inventories" (2006), Volume 4: Agriculture, Forestry and Other Land Use, Chapter 2: Generic Methodologies Applicable to Multiple Land-Use Categories, p. 2.25, available at http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/4_Volume4/V4_02_Ch2_Generic.pdf, accessed on February 17, 2017.

²⁸ "Appendix A: Calculation Details for CalEEMod," prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), p. 51, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2>, accessed on February 17, 2017.

The Draft AEA's GHG emissions analysis accounts for the hauling of the vegetation waste to off-site locations. Specifically, these hauling trips are accounted for using CalEEMod®. Site-specific information was used to estimate total haul truck trips for vegetation waste during the construction phase's site preparation activities. These trips are shown in Table 2-5 of the Draft AEA Appendix 1, and corresponding emissions associated with these trips were calculated based on the CalEEMod® default hauling trip length of 20 miles. It is mostly expected that the dead biomass would be hauled to an off-site location and not combusted, as the comment alludes to. As such, the GHG emissions analysis accounts for this aspect of vegetation removal. The project emissions associated with its organic wastes (e.g., vegetation changes) are included as a part of the overall project emissions, and these emissions are completely offset such that the net emissions in terms of CO_{2e} are zero as demonstrated in the Draft AEA. Soil CO₂ emission from land disturbing activities are addressed in **Response to Comment No. 08-23**.

CalEEMod® does not require a determination for how organic waste is treated because it would be speculative and, if biomass waste is used for combustion, those emissions would be the responsibility of the entity handling that organic waste. Accordingly, it would be speculative for the AEA's GHG emissions analysis to assume a different handling of organic waste from that included as described above via CalEEMod®.

Notably, CARB has developed and will be implementing a strategy to reduce emissions of short lived climate pollutants (SLCPs) in furtherance of Senate Bill (SB) 605 and SB 1383, which generally call for a reduction in the levels of black carbon (50 percent), CH₄ (40 percent), and hydrofluorocarbons (40 percent) by 2030. (See CARB's *Short-Lived Climate Pollutant Reduction Strategy* [March 2017].) CARB's strategy, which was finalized in March 2017, is designed for application at the state level, not to individual projects under CEQA. Further, that strategy document (on page 6) acknowledges that, "[b]lack Carbon is not one of the climate pollutants originally included in international climate frameworks, and it is not included in California's AB 32 inventory." CARB will pursue measures to reduce black carbon emissions; for example, CARB's strategy identifies the conversion of residential fireplaces and woodstoves in existing development to Environmental Protection Agency (EPA)-certified devices as one component necessary to achieving the 2030 reduction target. Those entities responsible for any combustion of organic materials will be required to comply with applicable standards. This project would comply with any applicable recycling requirements identified and adopted in furtherance of SB 1383.

Also of note, while CARB is working to develop carbon sequestration quantification methods that can inform its assessment of statewide GHG emissions reduction targets, these methods are not yet finalized and are being designed for use in statewide or regional contexts, rather than to account for project-specific vegetation changes in the CEQA context. (CARB's quantification methods are being developed as part of the "California natural and working LANDs Carbon Model [CALAND]."²⁹)

In summary, the CalEEMod® platform is the best available modeling tool for use in estimating carbon sequestration-related emissions in the CEQA context. The Draft AEA correctly uses CalEEMod® to comprehensively analyze terrestrial conversion vegetation emissions. Note that, per AEA Mitigation Measure 2-10: Offsetting Construction and Vegetation Change Emissions, net vegetation emissions would be fully offset. The comment provides no substantiated evidence that: (i) the carbon sequestration-related emissions of the project were underestimated through the use of CalEEMod®, (ii) CalEEMod®'s reliance on the IPCC guidelines to account for emissions associated with the release of DOM from existing vegetation is flawed, or (iii) the use of default values in CalEEMod®, which specifically were intended to generally apply to all areas within California, is not appropriate in this case.

Comment No. 08-6:

These AEA omissions represent a failure to proceed in the manner prescribed by CEQA.

²⁹ CARB, "The 2017 Climate Change Scoping Plan Update" (January 20, 2017 Draft), Appendix G: Natural and Working Lands Modeling, available at https://www.arb.ca.gov/cc/scopingplan/app_g_nwl_modeling.pdf, accessed on February 17, 2017.

Response No. 08-6:

The comment, which is a continuation of the previous comment, generally states that the analysis of GHG emissions from vegetation changes and ground disturbing activities is incomplete and that the Draft AEA did not proceed in a manner prescribed by CEQA. Please see the **Response to Comment No. 08-5** for information that addresses the omissions described by the comment. The Draft AEA satisfies CEQA, and the GHG emissions resulting from the referenced activities have been effectively analyzed and mitigated, as determined by CDFW's consultant (Ascent Environmental) and the ARB (see **Response to Comment No. 08-27**).

Comment No. 08-7:

Forest Land Conversion

The limitations of the Intergovernmental Panel on Climate Change (IPCC) forest land general default standards were clearly demonstrated in the 2010 California Oak Foundation comments. These forest default standards are applied indiscriminately worldwide.

Response No. 08-7:

The comment references a document that criticizes the use of the IPCC forest land defaults, suggesting instead the use of California Forest Project Protocol (FPP). This issue was previously raised in the prior environmental proceedings for the 2010 Final EIR; however, the issue was not raised in the litigation or found to be deficient by the California Supreme Court. The comment has not identified any changed circumstances, as compared to when the same comment was previously addressed by CDFW and, therefore, this comment is beyond the scope of the AEA. (See **Topical Response 1: Scope of the Additional Environmental Analysis.**) Nonetheless, for informational purposes, the following discussion is provided.

The FPP identifies only three types of projects for which it applies: reforestation, improved forest management, and avoided conversion projects. The FPP calculation requires the continual annual measurement of carbon stocks and harvested wood product to compare with baseline levels and then generate net GHG reductions and removals.³⁰ Based on the description, this program requires an elevated level of detailed information that is either unavailable or unknown for the project, and the comment has not provided any evidence that this level of detail is appropriate or necessary for development projects under CEQA. CalEEMod® Appendix A describes the method it uses to estimate vegetation change emissions as similar to the suggested FPP (see excerpt below).

A detailed response as to why it was correct to use the IPCC methodology can be found in the responses to Letter F21 of the 2010 Final EIR. IPCC is a well-respected scientific body established by the United Nations Environment Programme and the World Meteorological Organization. The IPCC methodology uses default values that work well with development projects.

As discussed in Appendix A of the CalEEMod® User's Guide:

The program calculates GHG emissions from vegetation activities of land use change and the planting of new trees according to the IPCC protocol for vegetation since it has default values that work well with the information typically available for development projects. This method is similar to the [CAR] Forest Protocol⁵⁴ and the Center for Urban Forest Research Tree Carbon Calculator⁵⁵, but it has more general default values available that will generally apply to all areas of California without requiring detailed site-specific information⁵⁶.

⁵⁴ CCAR. 2007. Forest Sector Protocol Version 2.1. Available at: http://www.climateregistry.org/resources/docs/protocols/industry/forest/forest_sector_protocol_version_2.1_sept2007.pdf

⁵⁵ Available at <http://www.fs.fed.us/ccrc/topics/urban-forests/ctcc/>

³⁰ "Forest Project Protocol." Version 3.3. Prepared by the Climate Action Reserve in November 2012, pg 43, available at <http://www.climateactionreserve.org/how/protocols/forest/dev/version-3-3/>, accessed March 2017.

⁵⁶ The CAR Forest Protocol and Urban Forest Research Tree Carbon Calculator are not used since their main focus is annual emissions for carbon offset considerations. As such they are designed to work with very specific details of the vegetation that is not available at a CEQA level of analysis.”³¹

In summary, using IPCC default values is appropriate in the CEQA context because IPCC is a reliable scientific body, it provides useful general information for development projects, and it follows a methodology similar to other reliable forest emission calculators.

Comment No. 08-8:

The California Emissions Estimator Model (CalEEMod) used for the AEA GHG biogenic emissions analysis employs IPCC forest land general defaults that are unrelated to actual California woodlands carbon stocking values (CalEEMod Appendix A, pp.51, 52). This one size fits all approach doesn't reflect California's diverse forests and fails to account for CEQA site-specific forest land conversion requirements or other relevant state GHG policies/laws. In fact, the only IPCC general default standards relevant to California forest lands are the international GHG global warming potential (GWP) values established by the 2013 IPCC Fifth Assessment Report.

Response No. 08-8:

The comment expresses a concern regarding the methodology that CalEEMod® uses when estimating emissions from forest land use changes. Specifically, the comment cites the use of IPCC forest land general defaults as an inappropriate analysis of land use change. The comment does not provide any evidence of a deficiency in the AEA analysis or explain why such information is needed for purposes of calculating the project's emissions under CEQA. As discussed in **Response to Comment Nos. 08-5 and 09-11**, CalEEMod® is recommended by the SCAQMD for analyzing GHG emissions under CEQA and is widely used by CEQA lead agencies, including Los Angeles County. For purposes of the AEA's GHG analysis, reliance on CalEEMod to estimate construction-related GHG emissions satisfies CEQA Guidelines Section 15064.4(a)(1), which allows a lead agency to select the model and methodology it considers most appropriate for the analysis, even if the model or methodology may have some limitations.

Further, the comment raises an issue that: (i) the same commenter previously raised in the underlying proceedings, and (ii) has not changed since CDFW considered and responded to the issue in the 2010 Final EIR. The proposed modifications associated with the Draft AEA (bridge design measures and GHG mitigation measures) in no way impact or relate to this issue. Because this comment is beyond the scope of the AEA (see **Topical Response 1: Scope of the Additional Environmental Analysis**), no additional response is needed.

However, please also see **Response to Comment No. 08-7** above for relevant information that is responsive to this comment. As demonstrated therein, the CalEEMod® platform is the best available modeling tool for use in estimating GHG emissions from vegetation changes in the CEQA context. The methodology uses default inputs from CalEEMod® that are intended to be generally applicable in the California region; thus, additional site-specific information only would serve to improve the calculated change in emissions and further reduce the project's emissions inventory estimates.

Comment No. 08-9:

See Exhibit B for detailed regulatory and GWP values comment.

Response No. 08-9:

The comment is a reference to the attached Exhibit B regarding a detailed regulatory and global warming potential (GWP) values discussion. Please see **Response to Comment No. 08-56** for a detailed response on the referenced exhibit. No further response is required.

³¹ "Appendix A: Calculation Details for CalEEMod," prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), p. 45, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2>, accessed on February 17, 2017.

Comment No. 08-10:

- Please provide the following project information:
 1. What GWP values did the AEA use for calculating CH₄, N₂O, black carbon and hydrofluorocarbon emissions?

Response No. 08-10:

The comment requests that information be provided regarding the GWP of four GHGs, including CH₄, nitrous oxides (N₂O), black carbon, and hydrofluorocarbons. However, the comment does not provide any evidence of a deficiency in the Draft AEA analysis or explain why such information is needed for purposes of calculating the project's emissions under CEQA. As discussed in **Response to Comment Nos. 08-5 and 09-11**, CalEEMod[®] is recommended by the SCAQMD for analyzing GHG emissions under CEQA and is widely used by CEQA lead agencies, including Los Angeles County. For purposes of the Draft AEA's GHG analysis, reliance on CalEEMod to estimate construction-related GHG emissions satisfies CEQA Guidelines Section 15064.4(a)(1), which allows a lead agency to select the model and methodology it considers most appropriate for the analysis, even if the model or methodology may have some limitations.

Further, the commenter raises an issue that has not changed since the 2010 Final EIR. The proposed modifications associated with the Draft AEA (bridge design measures and GHG mitigation measures) in no way impact or relate to this issue. Because this comment is beyond the scope of the AEA (see **Topical Response 1: Scope of the Additional Environmental Analysis**), no additional response is needed. However, for informational purposes, the following discussion is provided.

As described in Section 2.3.3 of the Draft AEA, GWP values of 298 for N₂O and 25 for CH₄ were used. These values were taken from the IPCC Fourth Assessment Report. When the AEA was prepared, the available version of CalEEMod[®] used IPCC Second Assessment Report GWPs. The AEA processed the CalEEMod[®] outputs to use the Fifth Assessment Report to be consistent with the 2014 First Update to the Scoping Plan (2014 Scoping Plan)³², EPA's Greenhouse Gas Reporting Program³³ and United Nations Framework Convention on Climate Change (UNFCCC) guidelines.³⁴

As previously discussed in **Response to Comment No. 08-5**, CalEEMod[®] does not estimate black carbon and hydrofluorocarbon emissions in its vegetation change module; therefore, the GWP values for these two GHGs were not included in the report as it would be unnecessary to do so.

Comment No. 08-11:

CEQA § 15364.5 states that "Greenhouse gas" or "greenhouse gases" includes but is not limited to: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. In 2016 Senate Bill 1383 designated methane, black carbon and hydrofluorocarbon short-lived climate pollutants. Neither the 2009 CEQA GHG amendments nor the enabling legislation Senate Bill 97 mention the term "carbon sequestration." CEQA's focus is "*the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions.*"

Response No. 08-11:

The comment recites provisions of the CEQA Guidelines and SB 1383, but does not raise an issue regarding the analysis presented in the Draft AEA; therefore, no further response is required.

³² Please see page 24 of CARB's First Update to the Scoping Plan (2014). CARB may transition to the use of AR5 in its subsequent reports. At the time the AEA was prepared, however, this CARB inventory was the most current guidance. Available at: https://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf. Accessed: March 2017.

³³ EPA's Greenhouse Gas Reporting Program bases its GWP values off of the IPCC Fourth Assessment Report as stated on their Reported Data web page available at <https://www.epa.gov/ghgreporting/ghgrp-reported-data>, accessed on March 24, 2017.

³⁴ UNFCCC Reporting Guidelines recommend GWP values from the Fourth Assessment Report as stated in Decision 24/CP.19 Revision of the UNFCCC reporting guidelines on annual inventories for Parties included in Annex I to the Convention, available at <http://unfccc.int/resource/docs/2013/cop19/eng/10a03.pdf#page=2>, accessed on March 24, 2017

Comment No. 08-12:

Further, the AEA must explain how the terrestrial conversion mitigation proposals result in less than significant GHG emissions consistent with state 2020, 2030 and 2050 GHG reduction targets.

Response No. 08-12:

The comment conflates a singular technical issue (i.e., terrestrial conversion) with the project's overall commitment to achieve net zero GHG emissions, which the Draft AEA found to be consistent with the state's 2020, 2030, and 2050 reduction targets. For detailed information regarding the project's consistency with the referenced statewide reduction targets, please see **Response to Comment No. 09-66**. Additionally, as explained above, Mitigation Measure 2-10 provides for all GHG emissions associated with the project's vegetation change activities to be fully offset.

Of note, extensive technical studies were undertaken to inventory all GHG emissions and to assess the efficacy of the mitigation measures. All of that information was provided in the Draft AEA and its technical reports. This technical information was reviewed by CARB and Ascent Environmental. As determined by the lead agency in consultation with Ascent Environmental and the, substantial evidence supports the AEA's conclusion that the project will result in no net increase in GHG emissions. (See Draft AEA, p. 2-36.)

Comment No. 08-13:

Upon the disposal of impacted vegetation, the decomposition of biomass does in all cases result in CO₂ and CH₄ biogenic emissions² and the combustion of biomass does in all cases result in CO₂, CH₄, N₂O and black carbon biogenic emissions³ (Exhibits C/D). CEQA doesn't differentiate between anthropogenic and biogenic GHG emissions. The following 2009 Natural Resources Agency response to the California Wastewater Climate Change Group proves the point:

Response 95-1: "Regarding the comment that the Guidelines should distinguish between anthropogenic and biogenic carbon dioxide emissions, the Natural Resources Agency notes that SB 97 did not distinguish between the sources of greenhouse gas emissions. Thus, it would not be appropriate for the Natural Resources Agency to treat the different categories of emissions differently absent a legislative intent that the Guidelines do so. Neither AB 32 nor the Air Resources Board's 2014 Scoping Plan distinguishes between biogenic and anthropogenic sources of greenhouse gas emissions. On the contrary, the 2014 Scoping Plan identifies methane from, among other sources, organic wastes decomposing in landfills as a source of emissions that should be controlled. (2014 Scoping Plan, at pp. 62-63)."

2 "Anaerobic digestion, chemical process in which organic matter is broken down by microorganisms in the absence of oxygen, which results in the generation of carbon dioxide (CO₂) and methane (CH₄). Sugars, starches, and cellulose produce approximately equal amounts of methane and carbon dioxide." Encyclopedia Britannica (2013).

<http://www.britannica.com/EBchecked/topic/22310/anaerobic-digestion>.

3 "...the combustion of biomass does in all cases result in net additions of CH₄ and N₂O to the atmosphere, and therefore emissions of these two greenhouse gases as a result of biomass combustion should be accounted for in emission inventories under Scope 1" (at p. 11). World Resources Institute/World Business Council for Sustainable Development (2005).

Response No. 08-13:

The comment provides background information regarding the GHGs that result from the decomposition and combustion of biomass associated with the disposal of removed vegetation. The comment is indirectly inferring that the emissions from vegetation changes have not been sufficiently analyzed because neither CH₄, N₂O, nor black carbon were explicitly accounted for in the vegetation change analysis. Although the comment demonstrates that other GHGs come from the disposal of vegetation, this does not nullify the analysis performed in the Draft AEA. Specifically, the AEA relies upon CalEEMod®, a model that uses

methods consistent with IPCC, to generate one-time emission estimates associated with vegetative land use changes. This level of analysis is sufficient for CEQA projects, and more detailed analysis is not required.

The comment also expresses that, for CEQA, no differentiation is needed between anthropogenic and biogenic sources of GHG emissions. CDFW agrees that no differentiation between anthropogenic and biogenic emissions is warranted; however, the Draft AEA addresses the emissions from vegetative losses in a comprehensive way through its modeling with a widely-accepted emissions estimator.

The comment cites a response that describes the 2014 Scoping Plan's inclusion of landfill CH₄ from organic waste as a source of emissions in need of control. The control of landfill emissions is outside the scope of this AEA and this project, which does not propose to construct or operate a landfill. Additionally, CalEEMod® does not assume vegetation waste or biomass being combusted, as suggested by the comment. See **Response to Comment No. 08-5** above for additional, relevant discussion about the Draft AEA's GHG emissions analysis, and information regarding why this comment is beyond the scope of the AEA.

Comment No. 08-14:

CalEEMod Methodology

The CalEEMod is used for project forest conversion GHG biogenic emissions analysis. Like all publicly available forest land conversion models the CalEEMod measures only the carbon loss (emission) or carbon gain (sequestration). The CalEEMod was not designed to calculate vegetation methane, nitrous oxide and black carbon biogenic emissions due to biomass decomposition/combustion. The California Air Pollution Control Officers Association have never claimed their model has that capability regarding forest resources conversion GHG biogenic emissions analysis.

Evidence that the CalEEMod only calculates CO₂ biogenic emissions is provided in the Vegetation 10.0 land change output table (Appendix B, p. 43) which identifies no methane or nitrous oxide emissions and doesn't recognize potential super pollutant black carbon emissions. Additionally, the CalEEMod allows forest carbon sequestration offset credits only for the "planting of new trees" and "There is no reduction in GHG emissions associated with preservation of land" (CalEEMod Appendix A, p. 50). That means any preserved land, anywhere.

Response No. 08-14:

The comment expresses dissatisfaction with the use of CalEEMod® to estimate GHG emissions that will result from the project's changes to the existing, on-site vegetation conditions. As such, the comment raises an issue that has not changed since it was previously raised by the commenter in the prior proceedings leading to preparation of the 2010 Final EIR. The proposed modifications associated with the Draft AEA (bridge design measures and GHG mitigation measures) in no way impact or relate to this issue. Because this comment is beyond the scope of the AEA (see **Topical Response 1: Scope of the Additional Environmental Analysis**), no additional response is needed. However, for informational purposes, the following discussion is provided.

As previously discussed (see **Response to Comment No. 08-5**), CalEEMod® is the best available model to estimate GHG emissions from land use development projects in the context of CEQA. The comment emphasizes that CalEEMod® only accounts for the biogenic CO₂ emissions from forest removal. While valid, it supports a misleading sentiment that the emissions have not been appropriately analyzed. As CalEEMod® is the industry standard for emissions estimates on CEQA projects, its emission estimates related to vegetation changes are adequate for this level of analysis. CalEEMod follows the IPCC method for calculating emissions from vegetation changes, and its approach focuses on the change in sequestration of CO₂ related to vegetation overall. Although it does not account explicitly for the direct emissions of CH₄ and other pollutants during decomposition, the estimation of emissions is appropriate for the general level of assessment required by CEQA.

The comment also discusses the allocation of carbon sequestration credit only for newly planted trees and not for the preservation of land. The comment expresses dissatisfaction with this methodology within CalEEMod® and implies that incorporation of additional offsets for the preservation of land would be appropriate. As stated by IPCC, “the accumulation of carbon in biomass slows with age, and thus for trees greater than 20 years of age, increases in biomass carbon are assumed [to be] offset by losses from pruning and mortality.”³⁵ IPCC’s position is also that, when trees and vegetation reach maturity (are “full grown”), there will be no further net carbon sequestration (i.e., the carbon released from dead biomass would be balanced with carbon sequestration from the growing biomass).³⁶ Thus, CalEEMod® does not assume that vegetation which stays on site or preserved lands can absorb more CO₂e each year if it remains in place.

In summary, CalEEMod itself is a verified tool that was developed with California regulatory bodies to be used for emissions estimating in development projects. For this reason, its estimates can be relied upon with regard to emissions from vegetative land use changes.

Comment No. 08-15:

The AEA does not stipulate that new planted trees will be a mitigation measure.

Response No. 08-15:

The comment states that the Draft AEA does not categorize planting of new trees as a mitigation measure. This is correct, as the planting of trees (i.e., the revegetation of the project site) is an element of the project’s design. As to the basis for the estimated number of new trees³⁷, the tree count is based on conservatively calculated, project-specific estimates provided by the project applicant that were informed by the density of landscaping in the existing neighboring community of Valencia, as well as the operative provisions of the Newhall Ranch Specific Plan (May 27, 2003) and Valencia Commerce Center Design Guidelines (August 29, 2006). Based on the mix of land use categories, new tree plantings are a reasonably foreseeable element of the landscaping plans for: single-family and multi-family residential lots³⁸, public and private recreational areas (e.g., parks of various sizes, trails), streetscapes (e.g., medians and landscaped setbacks between developed areas and roadways), parking lots and common areas in non-residential development areas, slopes, biological restoration areas, schools, etc. Based on the breadth of developed areas that would be comprehensively landscaped to enhance the planned community’s aesthetic attributes and serve other functions (e.g., reduce the amount of impervious surfaces), the tree counts used in the analysis are consistent with what actually would be planted over the course of the build-out period. Relatedly, the analysis conservatively does not incorporate specific estimates for other small bushes, shrubs and landscaping that will be included in the project (and which also will provide carbon sequestration).

Comment No. 08-16:

In fact, in the Vegetation 10.2 land use output table (p. 45) preserved existing trees are masquerading as “new” planted trees. The AEA inappropriate substitution of existing trees in place of new planted trees violates the CalEEMod assumptions. Models have parameters for a reason. It is not the prerogative of the end user to contravene model assumptions as they so choose.

Response No. 08-16:

The comment states that the Draft AEA is modeling existing trees, which are not removed during construction, as new trees; however, this is incorrect. The number of trees, as listed in Vegetation section 10.2, Net New trees in the CalEEMod® output files, are new trees that will be planted on site. As described in the previous comments, this AEA only accounts for emission/sequestration resulting from the removal of

³⁵ IPCC, “IPCC Good Practice Guidance for Land Use, Land-Use Change and Forestry” (2003), Appendix 3a.4, p. 3.298, available at http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf_files/Chp3/App_3a4_Settlements.pdf, accessed on February 17, 2017.

³⁶ “Appendix A: Calculation Details for CalEEMod,” prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), p. 47, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2>, accessed on February 17, 2017.

³⁷ The tree count used is consistent with that assumed in CDFW’s prior EIR.

³⁸ For example, based on standard practice, it is reasonable to assume that each detached single-family residence will have a minimum of one new tree planted.

existing vegetation and new trees that will be planted. Existing vegetation that is not removed is not within the scope of the AEA's GHG emissions analysis.

Comment No. 08-17:

To accurately and fully account for forest land conversion GHG biogenic emissions the total biomass weight⁴ of the impacted overstory/understory vegetation must be known, the means of biomass disposal identified and the soil organic carbon emissions calculated.

⁴ EPA/USDA FS, 2015. Forest Biomass Components: https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=86.

Response No. 08-17:

The comment lists one method to account for the emissions from forest land conversion in a development project. However, it incorrectly assumes that this method is the only way to sufficiently account for forest land conversion emissions. The Draft AEA accounts for land use changes as shown in Draft AEA Appendix 1, Table 2-10b.

The comment does not provide any evidence of a deficiency in the Draft AEA analysis or explain why its method to account for forest land conversion emissions is needed for purposes of calculating the project's emissions under CEQA. As discussed in **Response to Comment Nos. 08-5 and 09-11**, CalEEMod® is recommended by the SCAQMD for analyzing GHG emissions under CEQA.

Further, the commenter raises an issue that has not changed since the 2010 Final EIR. The proposed modifications associated with the Draft AEA (bridge design measures and GHG mitigation measures) in no way impact or relate to this issue. Because this comment is beyond the scope of the AEA (see **Topical Response 1: Scope of the Additional Environmental Analysis**), no additional response is needed.

Comment No. 08-18:

- Please provide the following forest land conversion information:
 1. What is the estimated total biomass weight of the impacted overstory and understory vegetation?

Response No. 08-18:

The comment requests information that is related to the methodology for calculating emissions as discussed in Comment No. 08-17. However, as explained in **Response to Comment No. 08-17**, CalEEMod® adequately estimates the carbon emissions resulting from the vegetation change using a slightly different methodology. For this reason, specific estimates for total biomass weight are not needed to fully account for the impact from the vegetation change. No further response is required.

Comment No. 08-19:

1. What are the estimated biomass decomposition CO₂ and CH₄ emissions?

Response No. 08-19:

The comment inquires about the biomass decomposition emissions. Please see **Response to Comment No. 08-5** for information regarding biomass decomposition emissions and explanation as to why this issue is beyond the scope of the AEA. Because this comment is beyond the scope of the AEA, no additional response is needed. However, for informational purposes, the following discussion is provided.

The Draft AEA uses the CalEEMod® methodology to estimate emissions from vegetation removal. In CalEEMod®, all the vegetation removed is assumed to be converted to DOM, and CO₂ emissions are estimated from this DOM. The emissions were estimated to be 70,149 MT CO₂ as shown in Table 2-10b, of Draft AEA Appendix 1. The estimated 70,149 MT CO₂ is the one-time release of GHG emissions from

removed vegetation biomass. CalEEMod assumes a carbon fraction of 0.47 for the dead biomass and assumes all carbon to be converted to CO₂. No CH₄ emissions are estimated for this calculation.

Comment No. 08-20:

1. What are the estimated biomass combustion CO₂, CH₄, N₂O and black carbon emissions?

Response No. 08-20:

The comment inquires about the biomass combustion emissions. Please see **Response to Comment Nos. 08-5 and 08-13** for information regarding biomass combustion emissions and explanation as to why this issue is beyond the scope of the AEA. Because this comment is beyond the scope of the AEA, no additional response is needed. However, for informational purposes, the following discussion is provided.

In accordance with CalEEMod®, decomposition-related emissions from this biomass, which will be transported to an off-site location, are included in the Draft AEA. The comment's assumption that the biomass would be combusted is not consistent with the CalEEMod® parameters. Further, the project does not propose to combust biomass as part of its handling process.

Comment No. 08-21:

1. Due to the transport of disposed biomass off-site, what are the estimated CO₂, CH₄, N₂O, black carbon and hydrofluorocarbon emissions?⁵

⁵ "...the analysis conservatively assumes that there will be 64 trips a day for hauling vegetation waste during the grading phase" (AEA Appendix 1, p. 9). SB 1383 requires: (1) a 50 percent statewide reduction in black carbon emissions and a 40 percent reduction in methane/hydrofluorocarbon emissions from 2013 levels by 2030; a 50 percent reduction in the level of the statewide disposal of organic waste in landfills from the 2014 level by 2020 and a 75 percent reduction from the 2014 level by 2025. The 2016 CARB Short-Lived Climate Pollutants Strategy lists on-road brake/tire (2%), on-road gasoline (2%) and on-road diesel (18%) as transportation sources of black carbon emissions.
http://www.arb.ca.gov/cc/shortlived/meetings/041_12016/a_appendixa.pdf

Response No. 08-21:

The comment inquires about the emissions generated from hauling vegetation waste to off-site locations. Please see **Response to Comment No. 08-5** for information regarding why this issue is beyond the scope of the AEA. Because this comment is beyond the scope of the AEA, no additional response is needed. However, for informational purposes, the following discussion is provided.

As noted in the footnote for this comment, the Draft AEA estimated hauling emissions by assuming 64 trips a day for hauling vegetation waste during the grading phase. The CO_{2e} from hauling vegetation waste are shown in Table 2-8 of the Draft AEA Appendix 1. These emissions are essentially from the hauling trucks as estimated by CalEEMod®. The CO₂ emissions are 9,001 MT CO₂ and the CH₄ emissions are 0.07 MT (1.75 MT CO_{2e}) which combine to total emission of 9,003 MT CO_{2e}. N₂O from hauling trucks are negligible. CalEEMod® does not estimate black carbon and hydrofluorocarbon emissions from hauling trucks.

The comment footnote also provides regulatory reduction targets. This is factual background information and does not directly raise an environmental issue within the meaning of CEQA. The comment footnote will be included as part of the record and made available to the decision makers prior to a final decision on the project. No further response is required.

Comment No. 08-22:

1. Explain how the proposed mitigation is consistent with SB 1383 2030 reduction requirements regarding methane, black carbon, hydrofluorocarbon emissions and landfill organic waste disposal.

Response No. 08-22:

The comment references SB 1383's 2030 reduction requirements and requests that an explanation be given for the proposed mitigation's consistency with this legislation. SB 1383 establishes methane emissions reduction targets in a statewide effort to reduce emissions of SLCPs in various sectors of California's economy. It sets emission reduction goals of 50 percent for anthropogenic black carbon, 40 percent for CH₄, and 40 percent for hydrofluorocarbons from 2013 levels. The bill specifically references reductions in statewide organic disposal (through increased organic recycling), implementation of dairy and livestock CH₄ capture and control, and the increase in usage of biogases for energy creation. SB 1383 establishes statewide reduction goals for SLCPs, and does not establish goals for individual projects undergoing CEQA review.

The project will be consistent with the requirements of this regulation because the project does not propose to undertake the referenced activities (e.g., the project does not combust organic waste nor have dairy or livestock operations). The project is not specifically responsible for how organic waste is treated, as the waste disposal method will be the responsibility of the waste haulers and waste landfills or treatment centers. However, the project would comply with any applicable recycling requirements adopted in furtherance of SB 1383. Notably, the project emissions associated with its organic wastes (e.g., vegetation changes) are included as a part of the overall project emissions, and these emissions are completely offset such that the net emissions in terms of CO₂e are zero as demonstrated in the Draft AEA.

Comment No. 08-23:

1. By soil series, what are the estimated soil organic carbon CO₂ biogenic emissions associated with permanent and temporary ground disturbing activities?

Response No. 08-23:

The comment requests that an emissions inventory be provided of the soil organic carbon CO₂ biogenic emissions from ground disturbing activities by soil series. However, the comment does not provide any evidence of a deficiency in the Draft AEA analysis or explain why such information is needed for purposes of calculating the project's emissions under CEQA. As discussed in **Response to Comment Nos. 08-5 and 09-11**, reliance on CalEEMod® to estimate construction-related GHG emissions satisfies CEQA Guidelines Section 15064.4(a)(1), which allows a lead agency to select the model and methodology it considers most appropriate for the analysis, even if the model or methodology may have some limitations.

Further, the comment raises an issue that has not changed since the 2010 Final EIR. The proposed modifications associated with the Draft AEA (bridge design measures and GHG mitigation measures) in no way impact or relate to this issue. Because this comment is beyond the scope of the AEA (see **Topical Response 1: Scope of the Additional Environmental Analysis**), no additional response is needed.

Comment No. 08-24:**Forest Land Conversion Direct Reduction Activities**

The applicant is "considering" three forest land conversion mitigation actions, "if ultimately pursued," that "may" be explored:

"The Project applicant is actively considering Direct Reduction Activities involving the forestry sector where the Project applicant (or its designee) could help conserve forest land or forest stocks for the purpose of sequestering GHG emissions. The Project applicant (or its designee) may pursue opportunities that involve three types of forestry sequestration activities:

Avoided conversion of forests: this activity involves the avoided de-forestation of forest land through a land purchase or, in the U.S., the creation of a conservation easement or other legally binding agreement.

Improved forestry management: this activity may include increasing rotation ages to increase the overall age of the forest, increasing the stocking of trees on understocked areas, and increasing forest productivity by thinning diseased and suppressed trees.

Response No. 08-24:

The comment restates information contained in the Draft AEA and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the project. No further response is required.

Comment No. 08-25:

Afforestation: This activity involves the planting of new trees” (GHG Reduction Plan, p. 3).

Rather than providing mitigation, forest thinning creates GHG emissions (Exhibit C). Avoided conversion, improved forest management and increased rotation ages don't mitigate forest conversion GHG biogenic emissions either. Existing trees aren't suddenly going to begin growing faster and sequester more carbon to reduce biomass/soil GHG biogenic emission impacts over time. California doesn't have 100 years or more for preserved mitigation forest growth to equal pre-construction carbon stocking levels or to mitigate the forest conversion non-CO₂ biogenic emissions. The appropriate means to feasibly and proportionally mitigate forest land conversion GHG biogenic emissions is by planting/maintaining the requisite number of native woodland trees in Los Angeles County to reduce forest conversion emissions 80 percent by 2050.

Response No. 08-25:

The comment does not raise any concerns with the Draft AEA, and opines on the benefit of forest conservation projects. Please see **Response to Comment Nos. 09-51 and 09-52** for a discussion of the benefits of forest conservation projects.

Comment No. 08-26:

Moreover, planted native trees would improve soil carbon stocking over time and provide wildlife habitat.)

Response No. 08-26:

The comment recommends planting native trees to improve soil carbon stocking and to benefit wildlife habitat. In response, the project includes expensive open space areas (more than 10,800 acres), and will vegetate the site with native, non-invasive plant species. As the comment does not raise any issue concerning the adequacy of the Draft AEA, no further response is provided.

Comment No. 08-27:

The AEA provides no science or fact to support how its potential land preservation mitigation measures are] going to actually feasibly mitigate the project's dual impacts of lost forest land carbon sequestration capacity and significant biomass disposal/soil disturbance GHG biogenic emissions.

Response No. 08-27:

The comment opines that the Draft AEA provides no science or facts to support the determination that the project's GHG emissions are feasibly mitigated. However, as memorialized in a letter from CARB to CDFW, dated November 3, 2016 (a copy of which is included in Final AEA Appendix 1):

“[C]ARB staff consulted with Department of Fish and Wildlife staff and technical experts at Ascent Environmental, the principal consultant assisting the Department. In doing so, [C]ARB staff reviewed the technical documentation provided for the evaluation of the project's total estimated GHG emissions and the reductions in emissions to be achieved through the mitigation measures. Based on staff's review, [C]ARB finds the documentation provides an adequate technical basis to determine

that the project would not result in any net additional GHG emissions after the mitigation measures are fully implemented.”

The CARB’s finding that the project’s GHG emission reduction calculations are documented by “an adequate technical basis” is part of the body of substantial evidence that supports the Draft AEA’s GHG emissions analysis, particularly as CARB is the state agency designated with the responsibility for and expertise to implement statewide policy on global climate change and the reduction of GHG emissions.

Additionally, to reiterate a previously stated fact, the Draft AEA follows CalEEMod® methodology to estimate emissions from the loss of vegetation and carbon sequestration from new trees that will be planted. The methodology follows IPCC guidance and is generally accepted to be scientifically correct.

The comment is thus not correct with its assertion. The Draft AEA provides substantial evidence to support that its mitigation measures will effectively mitigate project impacts.

Comment No. 08-28:

- Please provide the following forest land conversion mitigation information:
 1. Demonstrate mathematically how the retention or increased rotation age of existing trees would mitigate the CO₂, CH₄, N₂O, black carbon and hydrofluorocarbon emissions due to the decomposition, combustion and transportation of the impacted biomass.

Response No. 08-28:

The comment requests an additional mathematical analysis to demonstrate the benefits of the retention or increased rotation age of existing trees. However, the comment does not provide any evidence of a deficiency in the AEA analysis or explain why such information is needed for purposes of calculating the project’s emissions under CEQA. As discussed in **Response to Comment Nos. 08-5 and 09-11**, reliance on CalEEMod® to estimate construction-related GHG emissions satisfies CEQA Guidelines Section 15064.4(a)(1), which allows a lead agency to select the model and methodology it considers most appropriate for the analysis, even if the model or methodology may have some limitations.

Further, the comment raises an issue that has not changed since the 2010 Final EIR. The proposed modifications associated with the Draft AEA (bridge design measures and GHG mitigation measures) in no way impact or relate to this issue. Because this comment is beyond the scope of the AEA (see **Topical Response 1: Scope of the Additional Environmental Analysis**), no additional response is needed. However, for informational purposes, the following discussion is provided.

The AEA does not include a mitigation commitment specific to the retention or rotation of existing trees. To the extent that such practices are used to secure GHG emission reductions pursuant to Mitigation Measures 2-10 and 2-13, through implementation of the Newhall Ranch GHG Reduction Plan, approved protocols and methodologies would be used at the time of the implementation of such direct reduction activities, as described in the revised GHG Reduction Plan (see Final AEA Appendix 6). See **Response to Comment Nos. 09-51 and 09-52** for a discussion of forest offset projects and the potential use of such projects under the GHG Reduction Plan.

Comment No. 08-29:

1. Demonstrate mathematically how the retention of existing forest land would mitigate the soil organic carbon CO₂ biogenic emissions associated with ground disturbing activities.

Response No. 08-29:

The comment requests an additional mathematical analysis to demonstrate the benefits of the retention of existing forestland. Please see **Response to Comment No. 08-28** above for relevant information that is responsive to this comment.

Comment No. 08-30:

1. Explain how the proposed mitigation is consistent with SB 1383 2030 reduction requirements regarding methane, black carbon, hydrofluorocarbon emissions and landfill organic waste disposal.

Response No. 08-30:

The comment requests an analysis of the consistency of the project's mitigation commitments with SB 1383. Please refer to **Response to Comment No. 08-22** for information regarding the consistency of the project's mitigation measures with SB 1383.

Comment No. 08-31:

1. Explain how the non-tree planting migration measures are consistent with reducing GHG emissions statewide 80 percent by 2050.

Response No. 08-31:

The comment requests an explanation of how the project's non-tree planting mitigation measures are consistent with the statewide GHG emissions reduction target for 2050. Please see **Response to Comment No. 08-12** above for relevant information that is responsive to this comment. As explained therein, the project's commitment to attain net zero GHG emissions demonstrates its consistency with statewide climate policy.

Comment No. 08-32:

Cap and Trade Forest Conversion Offsets

Forest carbon offset credits weren't created for the purpose of mitigating the conversion of another forest, which would make no sense when California's declared forest sequestration goals are "no net loss" or to potentially significantly increase the state's forest carbon capture capacity by 2050.⁶ This fact is evidenced by the two state models, CalEEMod and Forest Project Protocol, which don't allow GHG offset reduction credits for CEQA's version of "avoided conversion." This is because both models recognize that existing forest carbon sequestration doesn't mitigate removed forest carbon dioxide emissions over time, let alone non-CO₂ biogenic emissions. The following example demonstrates how the Protocol forest carbon offset trading term avoided conversion works:

A Los Angeles County landowner of a 300-acre forest land property wants to sell. The landowner has an offer on the table from a developer to purchase the property. However, the landowner would prefer to sell to a local land trust at a substantially reduced price for placement in a conservation easement. In order for the land trust to register that forest land with the Climate Action Reserve for carbon offset trading purposes the land trust would have to provide specific documentation that the property was under imminent threat of development. The forest carbon offset trading market doesn't recognize CEQA avoided conversion because that concept doesn't avoid or mitigate forest land GHG biogenic emissions.

⁶ http://www.climatechange.ca.gov/forestry/documents/AB32_BOF_Report_5.pdf.

Response No. 08-32:

The comment provides an opinion regarding the use of forest conversion projects. As described in **Response to Comment No. 08-12**, the project achieves net zero increase in emissions through the overall commitment to a number of mitigation measures. See **Response to Comment Nos. 09-51** and **09-52** for a discussion of forest offset projects and the potential use of such projects under the GHG Reduction Plan.

Comment No. 08-33:

Non-Forest Land Terrestrial Conversion

A number of non-forest land vegetation types would be impacted by the project, including California annual grassland, coastal scrub chaparral, chamise chaparral and riparian woodland. The Vegetation 10.1 land change output table (p. 44) lists no methane, nitrous oxide or black carbon biogenic emissions associated with grassland, scrubland and riparian woodland impacts.

Response No. 08-33:

The comment objects to the presentation of data in Section 10.1 of the CalEEMod® Output in Draft AEA Appendix 1, noting that the output contains no CH₄, N₂O, or black carbon biogenic emissions associated with grassland, scrubland and riparian woodland impacts. However, the comment does not provide any evidence of a deficiency in the Draft AEA analysis or explain why such information is needed for purposes of calculating the project's emissions under CEQA. As discussed in **Response to Comment Nos. 08-5 and 09-11**, reliance on CalEEMod® to estimate construction-related GHG emissions satisfies CEQA Guidelines Section 15064.4(a)(1), which allows a lead agency to select the model and methodology it considers most appropriate for the analysis, even if the model or methodology may have some limitations.

Further, the commenter raises an issue that has not changed since the 2010 Final EIR. The proposed modifications associated with the Draft AEA (bridge design measures and GHG mitigation measures) in no way impact or relate to this issue. Because this comment is beyond the scope of the AEA (see **Topical Response 1: Scope of the Additional Environmental Analysis**), no additional response is needed. However, for informational purposes, the following discussion is provided.

As stated in earlier responses (see **Response to Comment No. 08-5**), the results of the carbon release/sequestration analysis reported in the Draft AEA were calculated using CalEEMod®, which follows the IPCC guidelines. CalEEMod® does not estimate CH₄, N₂O, or black carbon biogenic emissions from land use change based on the IPCC approach.

Comment No. 08-34:

Soil organic carbon (SOC) is a measure of the carbon contained within soil organic matter. Typically, the SOC stocking profile extends to a depth of one and a half meters (Exhibit E).⁷

⁷ USDA Natural Resources Conservation Service. 2016. Gridded Soil Survey Geographic (gSSURGO) Database. Version 2.2. USDA-NRCS Soil Science Division.

Response No. 08-34:

The comment provides factual information and does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the project. No further response is required

Comment No. 08-35:

- Please provide the following non-forest land vegetation type and soil series conversion information:
 1. By vegetation type, what is the total biomass weight of the impacted vegetation?

Response No. 08-35:

The comment requests additional information that is not directly relevant to GHG emissions estimated using CalEEMod®. Please see **Response to Comment No. 08-17** above, for information regarding the Draft AEA's appropriate use of CalEEMod® to estimate the subject GHG emissions and why biomass weight is not calculated under this methodology. Please also see **Response to Comment No. 08-5** for information regarding why this issue is beyond the scope of the AEA.

Comment No. 08-36:

1. By vegetation type, what are the estimated biomass decomposition CO₂ and CH₄ biogenic emissions?

Response No. 08-36:

The comment requests biomass decomposition emissions of CO₂ and CH₄ based on the type of vegetation. The table below shows total CO₂ emissions by vegetation type (as classified by CalEEMod®):

Vegetation Type	CO ₂ Emissions (MT)
Cropland	12,575
Grassland	4,394
Trees	23,288
Scrub	29,891
Wetlands	0

CalEEMod does not estimate CH₄ emissions from biomass decomposition as explained in response to prior comments.

Comment No. 08-37:

1. By vegetation type, what are the estimated biomass combustion CO₂, CH₄, N₂O and black carbon biogenic emissions?

Response No. 08-37:

The comment inquires about the biomass combustion emissions separated by vegetation type. However, the comment does not provide any evidence of a deficiency in the Draft AEA analysis or explain why such information is needed for purposes of calculating the project's emissions under CEQA. As discussed in **Response to Comment Nos. 08-5 and 09-11**, reliance on CalEEMod® to estimate construction-related GHG emissions satisfies CEQA Guidelines Section 15064.4(a)(1), which allows a lead agency to select the model and methodology it considers most appropriate for the analysis, even if the model or methodology may have some limitations.

Further, the comment raises an issue that has not changed since the 2010 Final EIR. The proposed modifications associated with the Draft AEA (bridge design measures and GHG mitigation measures) in no way impact or relate to this issue. Because this comment is beyond the scope of the AEA (see **Topical Response 1: Scope of the Additional Environmental Analysis**), no additional response is needed. However, for informational purposes, the following discussion is provided.

As discussed in **Response to Comment No. 08-20**, the Draft AEA assumes that all the biomass will be hauled to an off-site location and relies upon the CalEEMod® approach to calculate the loss in GHG sequestration. The comment incorrectly assumes that the biomass would be combusted. As explained in **Response to Comment No. 08-5**, if biomass waste is used for combustion, those emissions would be the responsibility of the entity handling that organic waste and it would be speculative for the AEA to assume a different handling of organic waste from that included as described above via CalEEMod®.

Comment No. 08-38:

1. Due to the transport of disposed biomass off-site, what are the estimated CO₂, CH₄, N₂O, black carbon and hydrofluorocarbon emissions?

Response No. 08-38:

As described in **Response to Comment No. 08-21**, the GHG emissions associated with hauling biomass off-site are detailed in Table 2-8 of Draft AEA Appendix 1. Please refer to **Response to Comment No. 08-21** for further explanation of the calculation for the project's GHG emissions from hauling vegetation waste.

Comment No. 08-39:

1. Explain how the proposed mitigation is consistent with SB 1383 2030 reduction requirement regarding methane, black carbon, hydrofluorocarbon emissions and landfill organic waste disposal.

Response No. 08-39:

As described in **Response to Comment No. 08-22**, the project will be consistent with the requirements of SB 1383 because the project does not include the covered activities (e.g., the project does not combust organic waste nor have dairy or livestock operations). The project is not specifically responsible for how organic waste is treated as the waste disposal method will be the responsibility of the waste haulers and waste landfills or treatment centers. The project would comply with any applicable recycling requirements adopted in furtherance of SB 1383.

Comment No. 08-40:

1. By soil series, what are the estimated SOC CO₂ biogenic emissions associated with permanent and temporary ground disturbing activities?

Response No. 08-40:

As explained in **Response to Comment No. 08-23**, the emissions from soil disturbing activities are not assessed by the CalEEMod® and, therefore, are not included in the analysis.

Comment No. 08-41:

Wetlands are major carbon sinks. Western US freshwater inland wetland and riparian corridor carbon stocks in the project region range between 75-99 MT carbon per acre.⁸ Impacted wetlands carbon sequestration rates can take decades or longer to replicate through replacement mitigation. In general, Ambrose et al. (2007) found that the primary state and federal wetland protection programs have been generating more wetlands of lower quality than the wetlands they allowed to be destroyed. CEQA GHG biogenic emissions analysis applies to all California wetlands, not just those wetlands designated waters of the United States. The Vegetation 10.1 land change output table lists no CO₂ or CH₄ biogenic emissions associated with wetland impacts.

⁸ Nahlik and Fennessy. 2016. Carbon Storage in US Wetlands. Nature Communications, Vol. 7, pp 1-9.

Response No. 08-41:

The comment objects to the presentation of data in Section 10.1 of the CalEEMod® Output in Draft AEA Appendix 1, opining that the output does not include CO₂ or CH₄ biogenic emissions associated with wetland impacts. However, the comment does not provide any evidence of a deficiency in the Draft AEA analysis or explain why such information is needed for purposes of calculating the project's emissions under CEQA. As discussed in **Response to Comment Nos. 08-5** and **09-11**, reliance on CalEEMod® to estimate construction-related GHG emissions satisfies CEQA Guidelines Section 15064.4(a)(1), which allows a lead agency to select the model and methodology it considers most appropriate for the analysis, even if the model or methodology may have some limitations.

Further, the comment raises an issue that has not changed since the 2010 Final EIR. The proposed modifications associated with the Draft AEA (bridge design measures and GHG mitigation measures) in no way impact or relate to this issue. Because this comment is beyond the scope of the AEA (see **Topical**

Response 1: Scope of the Additional Environmental Analysis), no additional response is needed. However, for informational purposes, the following discussion is provided.

CalEEMod® does not estimate any emissions from wetland removal. This comes from the model's assumption of zero carbon sequestration capacity for wetlands, as described in the CalEEMod® User Guide's Appendix A.³⁹ As explained in previous responses, the CalEEMod® model is the best available modeling tool for use in estimating carbon sequestration-related emissions in the CEQA context.

Comment No. 08-42:

- Please provide the following wetlands conversion information:
 1. By wetland type, what are the estimated vegetation CO₂, CH₄ and N₂O and black carbon biogenic emissions associated with impacts to all project area wetlands?

Response No. 08-42:

The comment inquires about the emissions estimates associated with wetlands conversion. Please see **Response to Comment No. 08-41** above for relevant information that is responsive to this comment.

Comment No. 08-43:

1. By wetland type, what are the estimated soil CO₂ biogenic emissions associated with impacts to all project area wetlands?

Response No. 08-43:

The comment requests additional emissions data associated with wetlands disturbed by the project. Please see **Response to Comment No. 08-41** above for relevant information that is responsive to this comment.

Comment No. 08-44:

1. By wetland type, what are the estimated carbon sequestration rates (i.e. metric tonnes carbon per acre per year) for the replacement mitigation? Please provide regional data to support the findings

Response No. 08-44:

The comment requests additional emissions data associated with wetlands mitigation areas proposed by the project. Please see **Response to Comment No. 08-41** above for relevant information that is responsive to this comment.

Comment No. 08-45:

1. Due to the transport of disposed biomass off-site, what are the estimated CO₂, CH₄, N₂O, black carbon and hydrofluorocarbon emissions?

Response No. 08-45:

The comment requests additional information from biomass hauling. As described in **Response to Comment No. 08-21**, the GHG emissions associated with hauling biomass off site are detailed in Table 2-8 of the Draft AEA Appendix 1.

³⁹ "Appendix A: Calculation Details for CalEEMod," prepared for CAPCOA and prepared by ENVIRON International Corporation and California Air Districts (July 2013), p. 51, available at <http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf?sfvrsn=2>, accessed on February 17, 2017.

Comment No. 08-46:

1. Explain how the mitigation is consistent with SB 1383 2030 reduction requirements methane, black carbon, hydrofluorocarbon emissions and landfill organic waste disposal

Response No. 08-46:

The comment again requests information about the consistency of the project's mitigation with SB 1383. Please see **Response to Comment No. 08-22** for relevant information.

Comment No. 08-47:

Summary

"FivePoint viewed the Supreme Court's ruling as an opportunity to set a higher standard of environmental sustainability-net zero greenhouse gas emissions" (Five Point Chairman/CEO Emile Haddad, Nov. 17, 2016).

Response No. 08-47:

The comment is a quote from the Five Point Chairman that expresses a commitment to net zero GHG emissions for the project. It does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the project. No further response is required.

Comment No. 08-48:

The Newhall Ranch AEA perpetuates the myth that forest land and other terrestrial conversion GHG emissions are simply an issue of carbon transformed to carbon dioxide. This fallacy belies the fact that potentially four other GHGs are involved, including the super pollutants methane and black carbon.

Response No. 08-48:

As described in previous comments (see **Response to Comment No. 08-5**) the Draft AEA relies on CalEEMod® to estimate emissions from land use change and new tree plantings. In the context of CEQA, this is the industry standard for land use development projects. The comment accuses the Draft AEA to not be comprehensive in including all possible emissions from this sector. However, CalEEMod® is the best available tool and the Draft AEA appropriately relied on the model for GHG estimation purposes in accordance with CEQA Guidelines Section 15064.4(a)(1). Further, the comment raises an issue that has not changed since the 2010 Final EIR. The proposed modifications associated with the Draft AEA (bridge design measures and GHG mitigation measures) in no way impact or relate to this issue. Because this comment is beyond the scope of the AEA (see **Topical Response 1: Scope of the Additional Environmental Analysis**), no additional response is needed.

Comment No. 08-49:

The constant among court decisions regarding GHG analysis is that project emissions must be fully rendered in a CEQA document.

Response No. 08-49:

The AEA follows the widely-accepted CalEEMod® methodology, the industry standard for GHG emissions estimates for CEQA projects. Additionally, the GHG emissions analysis presented in the Draft AEA was subject to review and scrutiny by CDFW's expert consultant (i.e., Ascent Environmental) and the state agency with expertise and responsibility for development and implementation of the state's climate policy, CARB. This approach ensures for a full accounting of the project's GHG emissions in a manner that accords to CEQA's requirements.

Comment No. 08-50:

This AEA appears designed to obfuscate and minimize project GHG biogenic emissions, rather than a bona fide attempt to comply with CEQA's focus of ascertaining the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions.

Response No. 08-50:

The comment concludes that the Draft AEA does not estimate biogenic emissions or mitigate GHGs in a genuine manner. The AEA has used a widely-accepted methodology to estimate emissions from vegetation changes for development projects under CEQA. The Draft AEA also identifies a comprehensive mitigation program to reduce these emissions. These emissions are completely offset, such that the net emissions in terms of CO_{2e} are zero, as demonstrated in the AEA. As noted in **Response to Comment No. 08-27**, CARB reviewed the Draft AEA and found the emission estimation methodology, as well as mitigation measures, to be technically adequate. As such, CDFW has completed a reasoned, good faith analysis, as required by CEQA.

Comment No. 08-51:

Substantial evidence has been presented that project GHG biogenic emissions will result in potentially significant environmental effects that have not been sufficiently analyzed or feasibly mitigated.

Response No. 08-51:

The comment states the comment letter has presented substantial evidence indicating that the project's biogenic emissions have not been sufficiently analyzed or feasible mitigated. However, as discussed in **Response to Comment No. 08-5** above, many of the issues raised and arguments advanced in this comment letter are beyond the scope of the AEA as they were previously raised by the same commenter in the underlying proceedings leading to preparation of the 2010 Final EIR, and were not found to be inadequate in that EIR by the California Supreme Court. Please also see responses to prior comments set forth in this comment letter (see **Response to Comment No. 08-5**), which substantiate the methodological parameters used by CDFW in accordance with CEQA Guidelines Section 15064.4(a)(1).

Comment No. 08-52:

The project has not made "a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project" (CEQA Guidelines § 15064.4(a)).

Response No. 08-52:

Please see responses to prior comments set forth in this comment letter, which substantiate the methodological parameters used by CDFW in accordance with CEQA Guidelines Section 15064.4(a)(1).

Comment No. 08-53:

Therefore as an informational document, in that it fails to apprise decision-makers/public of the full range and intensity of the adverse GHG emission effects on the environment that may reasonably be expected if the project is approved.

Response No. 08-53:

Please see responses to prior comments set forth in this comment letter, which substantiate the methodological parameters used by CDFW in accordance with CEQA Guidelines Section 15064.4(a)(1).

Comment No. 08-54:

Vegetation

- Brown, S., T. Pearson, A. Dushku, J. Kadyzewski, and Y. Qi. 2004. Baseline greenhouse gas emissions for forest, range, and agricultural lands in California. Winrock International, for the California Energy Commission, PIER Energy-Related Environmental Research. Publication # CEC 500-04-069F.
- Chojnacky D.C.; Heath L. S.; Jenkins J. C. 2014. Updated generalized biomass equations for North American tree species. *Forestry Journal*, 87, 129-151.
- Gonzalez et al. 2010. Forest carbon densities and uncertainties from Lidar, QuickBird, and field measurements in California. Center for Forestry, University of California, Berkeley, CA.
- Smith, James E.; Heath, Linda S.; Jenkins, J. C. 2003. Forest Volume-to-Biomass Models and Estimates of Mass for Live and Standing Dead Trees of U.S. Forests. General Technical Report NE-298. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Research Station. 57 p.
- Van Deusen, P., and L.S. Heath. 2016. COLE web applications suite. NCASI and USDA Forest Service, Northern Research Station. COLE database last updated 1/21/2016.
- Waddell, K. and B. Hiserote. 2005. The PNW -FIA Integrated Database User Guide: A database of forest inventory information for California, Oregon, and Washington. Forest Inventory and Analysis Program, Pacific Northwest Research Station, Portland, Oregon, USA.
- Woodall, C.W., L.S. Heath, G.M. Domke, and M.C. Nichols. 2011. Methods and equations for estimating aboveground volume, biomass, and carbon for trees in the U.S. forest inventory, 2010. Gen. Tech. Rep. NRS-88. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 30p.

Soil

- Baldock J. A. and Skjemstad J. O. 1999. Soil Organic Carbon/Soil Organic Matter, in *Soil Analysis: an Interpretation Manual*, Eds. Peverill, KI, Sparrow, LA and Reuter, DJ, CSIRO Publishing.
- Brady, N.C., and Weil, R.R. 1999. *The nature and properties of soils*. Prentice Hall, Inc., Upper Saddle River, NJ.
- Davidson, E.A. & Ackerman, I.L. 1993. *Biogeochemistry*. 20: 161. doi:10.1007/BF00000786
- USDA Natural Resources Conservation Service. 2016. Gridded Soil Survey Geographic (gSSURGO) Database. Version 2.2. USDA-NRCS Soil Science Division.
- Whendee L. Silver, Rebecca Ryals, and Valerie Eviner. 2010. *Soil Carbon Pools in California's Annual Grassland Ecosystems* University of California-Davis, 1210 PES, Mail Stop 1, One Shields Ave, Davis, CA 95616.
- Zhi J. et al. 2014. Estimating Soil Organic Carbon Stocks and Spatial Patterns with Statistical and G/S-Based Methods. *PLoS ONE* 9(5): e97757. doi:10.1371/journal.pone.0097757.

Wetlands

- Ambrose, R.F., Callaway, J. C., and S. F. Lee. 2007. *An Evaluation of Compensatory Mitigation Projects Permitted Under Clean Water Act Section 401 by the California State Water Resources Control Board, 1991-2002*. Prepared for California State Water Resources Control Board. 158 pp.

Dahl, T. E. 2011. Status and Trends of Wetlands in the Conterminous United States 2004 to 2009. US Department of the Interior; Fish and Wildlife Service.

Nahlik, A. M. & Fennessy, M. S. Carbon storage in US wetlands. 2016. Nat. Commun. 7, 13835 doi: 10.1038/ncomms13835.

Schlesinger, W. H. 1997. Biogeochemistry: An analysis of global change. San Diego, Calif: Academic Press.

U.S. Environmental Protection Agency. 2016. National Wetland Condition Assessment: A Collaborative Survey of the Nation's Wetlands. EPA Publication 843-R- 15-005.

Response No. 08-54:

The comment lists multiple references, without identifying or explaining the relevance of the references to the comments offered in the comment letter or the analysis provided in the Draft AEA. The comment is noted, but no further response can be provided or is required due to the nature of the comment.

Comment No. 08-55:

Provided below is the first page of Exhibit A to Letter No. 08. A full copy of the attachment is available on the CD located on the inside cover of Volume 1 of the Final AEA.



July 8, 2010

U.S. Army Corps of Engineers
Ventura Field Office
2151 Alessandro Drive, Suite 110
Ventura, California 93001
Attn: Aaron Allen

California Department of Fish and Game
Newhall Ranch EIS/EIR Project Comments
4949 Viewridge Avenue
San Diego, California 92123
Attn: Dennis Bedford

Re: Newhall Ranch FEIS/FEIR

Dear Messrs. Allen and Bedford:

California Oaks (CO) appreciates the opportunity to submit Newhall Ranch Project FEIS/FEIR public comments. CO finds that due to numerous informational deficiencies, the FEIS/FEIR fails to properly analyze or proportionally mitigate direct and indirect project greenhouse gas (GHG) impacts. Specifically, (1) the FEIS/FEIR fails to adequately analyze the GHG emissions effect of forestland conversion to non-forestland use; (2) the FEIS/FEIR fails to comply with Public Resources Code (PRC) § 21083.4 oak woodlands measurement standards; (3) the FEIS/FEIR fails to analyze the effect of GHG emissions on oak woodlands habitat and oak mitigation planting. Consequently, the FEIS/FEIR fails to provide the GHG effects information necessary for informed public participation and informed decision-making regarding project environmental effects or proportional mitigation measures.

1. The FEIS/FEIR Fails to Adequately Analyze the Greenhouse Gas Emissions Effect of Forestland Conversion to Non-Forestland Use

FEIS/FEIR: "Several assumptions were utilized in quantifying the emissions resulting from land use/vegetation changes. First, the IPCC provides default annual CO₂e sequestration rates on a per tree basis. The numbers given are for 10 likely species classes in urban areas, and range from a high of 0.052 tonne CO₂e per year in hardwood maple to a low of 0.012 tonne CO₂e/year in juniper trees. Alternatively, an average of 0.035 tonne CO₂e/year per tree can be assumed if the tree type is not known. Because the tree types that will be planted on the Project area are not known at this time, the 0.035 tonne CO₂e/year per tree rate was utilized." (FEIS/FEIR at 8.0-45)

Comment: The FEIS/FEIR assumptions are unscientific and fallacious. Rather than use the California Forest Project Protocol GHG measurement methodology to analyze forestland carbon sequestration and biogenic GHG emissions, the FEIS/FEIR instead chose the wholly inappropriate International Panel on Climate Change generic vegetation standard to measure forestland GHG emissions. For example, the project site is largely vacant non-urban land. There are no hardwood maple, juniper or other IPCC-listed tree species growing on-site. The

428 15th Street, Suite 10A, Oakland CA 94612 510/208-4426 email oakstake@californiaoaks.org www.californiaoaks.org Tax ID# 680224744

Response No. 08-55:

This exhibit is a comment letter that was previously submitted by the commenter; responses to the comment letter are available in the 2010 Final EIR – see the responses to Letter F21 therein.

Comment No. 08-56:

Provided below is the first page of Exhibit B to Letter No. 08. A full copy of the attachment is available on the CD located on the inside cover of Volume 1 of the Final AEA.

EXHIBIT B
PAGE 1 OF 1
Exhibit B

Terrestrial Conversion Greenhouse Gas Emissions

Regulatory Framework

The following regulatory background information provides context to the importance of reducing and feasibly mitigating terrestrial conversion greenhouse gas (GHG) biogenic emission effects:

Executive Order S-3-05

Signed by Governor Schwarzenegger on June 1, 2005. Executive Order S-3-05 established a California GHG reduction target of 80 percent below the 1990 level by 2050.

Assembly Bill 32

AB 32 defines carbon dioxide equivalent (CO₂e) to mean, "... the amount of carbon dioxide by weight that would produce the same global warming impact as a given weight of another greenhouse gas, based on the best available science, including from the Intergovernmental Panel on Climate Change [IPCC]."

"The IPCC released its Fifth Assessment Report (AR5) in 2013, including scientific research and conclusions regarding current GHG global warming potential (GWP) values for determining CO₂e. The IPCC recommends using the AR5 GWP values, as they reflect the best information on global warming potentials. The Air District is using the GWP values from AR5, which include a GWP for methane (including all feedback effects) of 34. We recommend that ARB also use GWPs from AR5 in the Strategy."¹ Consistent with the AB 32 carbon dioxide equivalent definition, the Bay Area Air Quality Management District uses the GWP values from AR5.

Senate Bill 97

Signed by Governor Schwarzenegger on August 24, 2007. This statute required that the Office of Planning and Research prepare CEQA guidelines for evaluating the effects of GHG emissions and for mitigating such effects. The Natural Resources Agency adopted these guidelines on December 31, 2009.

Senate Bill 32

Signed by Governor Brown on September 8, 2016. This statute requires that statewide greenhouse gas emissions be reduced to 40% below the 1990 level by 2030.

Senate Bill 1383

Signed by Governor Brown on September 19, 2016. This statute requires: (1) a 50 percent statewide reduction in black carbon emissions and a 40 percent reduction in methane and hydrofluorocarbon emissions from 2013 levels by 2030; (2) a 50-percent reduction in the level of the statewide disposal of organic waste in landfills from the 2014 level by 2020 and a 75-percent reduction from the 2014 level by 2025.²

Senate Bill 1386

Signed by Governor Brown on September 23, 2016. This statute states that the protection and management of natural lands, as defined, is an important strategy in meeting the state's GHG reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural lands.

¹ BAAQMD May 26, 2016 letter from Jack P. Broadbent, Executive Officer/APCO to Richard Corey, Executive Officer, California Air Resources Board regarding ARB Short-Lived Climate Pollutants Strategy.

² See Gov. Brown's SB 1383 signing comments at <https://www.gov.ca.gov/news.php?id=19549>.

Response No. 08-56:

This exhibit provides background information regarding California-specific legislation and executive policy that is described as relevant to terrestrial conversion and its GHG biogenic emission effects. The exhibit is noted, and will be included in the record presented to the decision makers for consideration when reviewing the project and its environmental analysis.

Comment No. 08-57:

Provided below is the first page of Exhibit C to Letter No. 08. A full copy of the attachment is available on the CD located on the inside cover of Volume 1 of the Final AEA.

**EXHIBIT C
PAGE 1 OF 1**

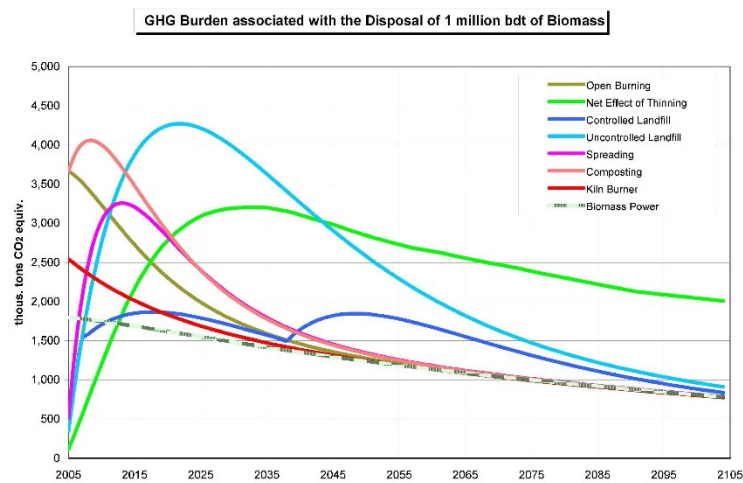
Exhibit C

Biomass Disposal Greenhouse Gas Emissions

The following chart illustrates the relative GHG indirect biogenic emission effects from common methods of vegetation (biomass) disposal.¹ The biomass combustion GHG emission values do not include black carbon emissions.

Uncontrolled landfill disposal produces the greatest biomass GHG biogenic emissions followed by composting, open burning, mulching, forest thinning, kiln burner, controlled landfill and biomass power. The chart demonstrates that peak GHG emissions vary substantially depending on the means of biomass disposal, with the higher peaks reflecting increased amounts of methane and/or nitrous oxide emissions.

Terminology: Net effect of thinning emissions apply to forest thinning emissions and spreading emissions are equivalent to mulching emissions.



Graphic: Gregory Morris, PhD. *Bioenergy and Greenhouse Gases*. Published by Pacific Institute (2008).

¹ One bone dry ton (bdt) is a volume of wood chips (or other bulk material) that would weigh one ton (2000 pounds, or 0.9072 metric tons) if all the moisture content was removed.

Response No. 08-57:

This exhibit contains a chart illustrating the GHG emissions associated with biomass disposal. The exhibit is noted, and will be included in the record presented to the decision makers for consideration when reviewing the project and its environmental analysis.

Comment No. 08-58:

Provided below is the first page of Exhibit D to Letter No. 08. A full copy of the attachment is available on the CD located on the inside cover of Volume 1 of the Final AEA.

**EXHIBIT D
PAGE 1 OF 1**

Exhibit D

Biomass Decomposition and Combustion GHG Emissions

Governor Brown

"We must also reduce the relentless release of methane, black carbon and other potent pollutants across industries. And we must manage farm and rangelands, forests and wetlands so they can store carbon." – January 2015 inaugural address regarding the state's greenhouse gas reduction goals for the next 15 years.

California Air Resources Board

"California is committed to reducing emissions of CO₂, which is the most abundant greenhouse gas and drives long-term climate change. However, short-lived climate pollutants [methane, black carbon, etc.] have been shown to account for 30-40 percent of global warming experienced to date. Immediate and significant reduction of both CO₂ and short-lived climate pollutants is needed to stabilize global warming and avoid catastrophic climate change." *Reducing Short-Lived Climate Pollutants in California, 2014.*

UC Irvine Engineering

"Generation of electricity from biomass is unique among the potential technologies for meeting RPS [renewable portfolio standards] goals in that it is associated with the generation of substantial amounts of GHGs and pollutants at generation sites during operation. This feature elucidates the importance in assessing GHG and air quality impacts from biopower." Sospedra, M. and Dabdub, D. 2015. *Assessment of the Emissions and Energy Impacts of Biomass and Biogas Use in California.*

Stanford Engineering

"Biomass burning also includes the combustion of agricultural and lumber waste for energy production. Such power generation often is promoted as a 'sustainable' alternative to burning fossil fuels. And that's partly true as far as it goes. It is sustainable, in the sense that the fuel can be grown, processed and converted to energy on a cyclic basis. But the thermal and pollution effects of its combustion - in any form - can't be discounted, [Mark] Jacobson said.

"The bottom line is that biomass burning is neither clean nor climate-neutral," he said. "If you're serious about addressing global warming, you have to deal with biomass burning as well." engineering.stanford.edu/news/stanford-engineers-study-shows-effects-biomass-burning-climate-health Jacobson, M. Z. 2014. *Effects of biomass burning on climate, accounting for heat and moisture fluxes, black and brown carbon, and cloud absorption effects.*

Phoenix Energy

"As wood starts to decompose it releases roughly equal amounts of methane (CH₄) and carbon dioxide (CO₂)." 2016. <http://www.phoenixenergy.net/powerplan/environment>

Macpherson Energy Corporation

"Rotting produces a mixture of up to 50 percent CH₄, while open burning produces 5 to 10 percent CH₄." 2014. <http://macphersonenergy.com/mt-poso-conversion.html>

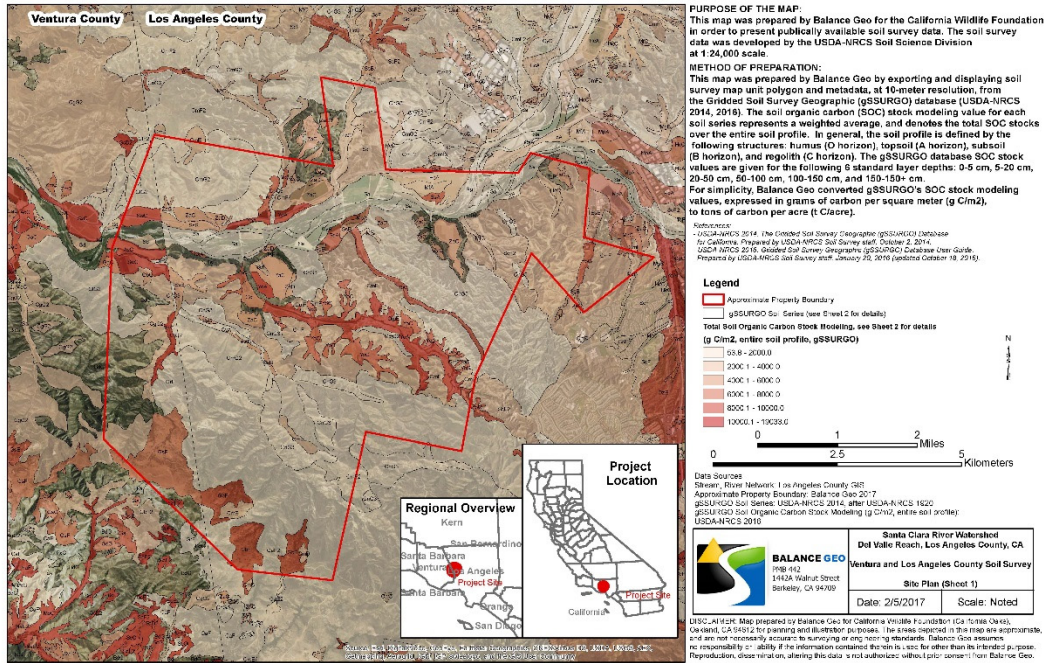
Response No. 08-58:

This exhibit provides statements from California Governor Brown, CARB, and others regarding GHG emissions associated with biomass decomposition and combustion. The exhibit is noted, and will be included in the record presented to the decision makers for consideration when reviewing the project and its environmental analysis.

Comment No. 08-59:

Provided below is the first page of Exhibit E to Letter No. 08. A full copy of the attachment is available on the CD located on the inside cover of Volume 1 of the Final AEA.

**EXHIBIT E
PAGE 1 OF 2**



Response No. 08-59:

This exhibit illustrates the location of the project site and contains soil classification information. The exhibit is noted, and will be included in the record presented to the decision makers for consideration when reviewing the project and its environmental analysis.