UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

September 1, 2009

Mr. Aaron Allen, North Coast Branch Chief
U.S. Army Corps of Engineers
Ventura Field Office
2151 Alessandro Drive, Suite 110
Ventura, CA 93001

Subject: Draft Environmental Impact Statement for the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan, Santa Clarita, California (CEQ #20090134)

Dear Mr. Allen:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan (project) pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. These comments were also prepared under the authority of, and in accordance with, the provisions of the Federal Guidelines (Guidelines) promulgated at 40 CFR 230 under Section 404(b)(1) of the Clean Water Act (CWA). Our detailed comments are enclosed.

The EPA appreciates efforts of the Corps and the project applicant, Newhall Land and Farming Company (Newhall) to coordinate with the EPA prior to and during the review of the Project DEIS including several meetings since 2004 consisting of site visits, face-to-face meetings, and phone calls. We also appreciate the participation of other agencies such as the California Department of Fish and Game and the Los Angeles Regional Water Quality Control Board in some of these meetings. The resulting DEIS for the Project provides a robust analysis of the potential impacts of the Project alternatives. Quality of the DEIS not withstanding, we have rated the document EO-2, Environmental Objections – Insufficient Information (see enclosed EPA Rating Definitions), based on potential impacts to aquatic resources of national importance that should be avoided.

Newhall's Alternative 2 is the Proposed Project and would result in significant direct impacts to tributaries of the Santa Clara River, which include modifying 10.5 miles of tributary

and burying 11.3 miles in stormdrain resulting in the fill of approximately 79 percent of the natural tributaries on the site. The Proposed Project would also result in the net loss of 157 acres of the 100-year floodplain of the Santa Clara River and place approximately 3,000 linear feet of riprap along banks of the river to protect three new bridges, and 22 outfalls, and to armor tributary confluences in place. The EPA does not consider the Proposed Project to be the least environmentally damaging practicable alternative, consistent with the Guidelines, and, as a result has clarified in our August 24, 2009 letter to the Corps that additional avoidance of waters of the United States is necessary. This enclosed letter was provided consistent with the Memorandum of Agreement between the EPA and the Corps regarding Section 404(q) of the CWA, and is hereby incorporated into our NEPA comments.

Concerns pertaining to waters of the U.S. and water resources include the use of the Hybrid Assessment of Riparian Condition (HARC) assessment tool to identify the amount and location of compensatory mitigation. Although we support the use of this method as a diagnostic tool we do not consider it appropriate for determining the amount and location of compensatory mitigation. We are also concerned about the proposed extensive use of tributary channel stabilization without a commitment to sufficient use of low impact development best management practices to control post-project runoff. Furthermore, we recommend additional measures to reduce water supply demands, and suggest the FEIS discuss the potential impacts of climate change on water supply for the Proposed Project.

We concur that Alternative 7, which avoids impacts within the 100-year floodplain, is the environmentally superior alternative, based on the Corps' conclusion that the Proposed Project would have substantially more environmental impacts. At the same time we recognize that the existing tributaries are degraded, and support the use of fluvial geomorphic methods to restore and stabilize these systems. We are concerned with the narrow purpose and need of the project to meet the basic objectives of the 2003 Newhall Ranch Specific Plan that was adopted by LA County, and recommend the Corps revise the purpose and need statement, in the FEIS, in order to avoid eliminating Alternative 7, or a similar alternative from further consideration. We also recommend the Corps and Newhall adopt the Spineflower Conservation Plan in Alternative 6 that would maximize habitat connectivity on site.

Regarding air quality, we are concerned with the insufficiency of the general conformity determination of consistency with the State Implementation Plan, and suggest additional emission reduction measures to improve the already robust analysis and mitigation commitments for global climate change. Additional green building resources are also provided in our enclosed detailed comments.

We appreciate the opportunity to review this DEIS and look forward to continued coordination with the Corps and Newhall. When the FEIS is published, please send two copies to us at the address above (Mail Code: CED-2). If you have any questions, please contact me at 415-972-3521, or contact Paul Amato, the lead reviewer for this project. Paul can be reached at 415-972-3847 or amato.paul@epa.gov.

Sincerely,

/s/

Enrique Manzanilla, Director
Communities and Ecosystems Division

Enclosures: Summary of EPA Rating System
EPA's Detailed Comments
EPA's August 24, 2009 ARNI Letter to the Corps

cc:

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Aquatic Resources of National Importance

The Corps should work with the EPA during the development and selection of the Least Environmentally Damaging Practicable Alternative (LEDPA). Based on information for the Proposed Project (Alternative 2), the applicant, Newhall Land and Development (Newhall) has not demonstrated compliance with the Clean Water Act Section 404(b)(1) Guidelines. The Guidelines require the Corps to select the LEDPA based on alternatives avoidance, minimization and finally, mitigation of unavoidable impacts to waters of the United States. The EPA strongly believes that the Proposed Alternative is not the LEDPA and that further avoidance of waters is necessary. The project alternatives generally avoid impacts to the Santa Clara River; however, the Proposed Project would modify 10.5 miles of tributary and bury 11.3 miles in stormdrain resulting in the fill of approximately 79 percent of the natural tributaries on the site. Of this, 40 percent would occur in the Potrero Canyon drainage alone. Impacts to Potrero Canyon include placing 10,918 linear feet (7.15 acres) of the stream in buried stormdrains; filling the valley with 5 to 25 feet of fill and recreating the remaining channel with 98 grade control structures and a confined floodplain; and filling and relocating 6.52 acres of wetlands and rare cismontane wetland. Of all the drainages assessed for baseline conditions, Potrero Canyon was rated the highest using the Hybrid Assessment Riparian Condition (HARC) method.

Based on these impacts, and the apparent lack of avoidance, the EPA has identified the Santa Clara River and its tributaries as an Aquatic Resource of National Importance (ARNI) and determined that the Proposed Project may result in significant and unacceptable impacts. Accordingly, we have sent our August 24, 2009 letter to the Corps consistent with the August 1992 Memorandum of Agreement between the EPA and the Corps regarding Section 404(q) of the CWA. The letter provides detailed comments regarding our concerns with the impacts of the Proposed Project on the Santa Clara River and tributaries and is incorporated into our Draft Environmental Impact Statement (DEIS) comments by reference.

Given the above, the EPA would be opposed to approval of the Proposed Project, and we strongly encourage the Corps to work with us during the development of the LEDPA. For additional information pertaining to waters of the U.S., please contact Eric Raffini, EPA Wetlands Regulatory Program, at (415) 972-3572, or by email at raffini.eric@epa.gov.

> Recommendation:
> The Corps should not permit the Proposed Project and should work with the EPA during development and identification of the LEDPA for the project.

Alternatives

Of the action alternatives assessed, the Corps should select Alternative 7 or a similar "hybrid" as the Preferred Alternative in the FEIS. The EPA agrees with the DEIS determination that of the action alternatives considered, Alternative 7 is the Environmentally Superior Alternative

because it would result in the lowest level of environmental impacts for the majority of the resource categories assessed. As stated in the DEIS, Alternative 7 avoids the 100-year floodplain, eliminates two planned bridges and avoids spine flower. This avoidance is largely achieved by reducing the Proposed Project footprint. Noteworthy reductions in environmental impacts of Alternative 7, when compared to the Proposed Project include:

- A net gain of 141.9 acres of FEMA floodplain on the Santa Clara River vs. a net loss of 157 acres for the Proposed Project;
- A 66 percent increase in preserved tributary drainage;
- A 77 percent reduction in modified tributary drainage;
- A 68 percent reduction in tributary drainage converted to buried stormdrain, including the entire Magic Mountain and Middle Canyon drainages;
- An 87 percent increase in avoidance of impacts to jurisdictional waters;
- A 35 percent reduction of impacts on geomorphology and riparian resources;
- A 34.4 percent reduction of permanent vegetation community and land cover loss, including an 82.7 percent reduction of impacts to riparian and bog/marsh communities;
- Alternative 7 impacts to waters would be mitigated on site while the Proposed Project would require over 80 acres of unidentified off-site mitigation for tributary impacts and 52 acres of unidentified off-site mitigation for Santa Clara River impacts;
- A gain of 371.5 more HARC-AW Score Units;
- 60 percent reduction in water supply demands;
- Substantially less impacts to biological resources, including listed species;
- A 35 percent decrease in average daily traffic and 6 fewer deficient off-site road segments; and
- 54,328 (18 percent) fewer tons of carbon dioxide equivalent greenhouse gas emissions per year.

Impacts from the Proposed Project are discussed below in greater detail as part of our specific resource impact comments.

In terms of the proposed Spineflower Conservation Plan, the EPA considers Alternative 6 to be environmentally superior because it focuses on providing the maximum amount of habitat connectivity within and among the proposed spineflower preserves. We understand, through personal communication, that the California Department of Fish and Game (CDFG) concurs with this determination[1].

We recognize that several reaches of tributaries are highly degraded from past land use and that some channel stabilization may be required in order to prevent further impacts to these resources. The EPA has conducted site visits to Newhall Ranch, most recently on July 25, 2009, where we observed these degrading conditions with representatives of Newhall. Implementation of Alternative 7 would avoid the tributaries and their 100-year floodplains and could potentially fail to address currently unstable conditions. Given the potential for reduced sediment from increased impervious surfaces and increased flows from the proposed development, we suggest

[1] Based on input from Dennis Bedford, CDFG during a July 13, 2009 phone call with the Corps, Newhall, CDFG, the LA Regional Water Quality Control Board, and EPA.

Alternative 7 be modified to include stabilization of degraded tributary reaches using fluvial geomorphic principles, including maximizing the floodplain buffers between proposed development and the stream channel corridor.

For the purposes of NEPA, the EPA assumes that all alternatives, including Alternative 7, are considered reasonable. We understand, however, that a hybrid alternative may be considered in the FEIS following consideration of all DEIS comments; and for this reason, the DEIS lacks identification of a preferred alternative. We also understand that the Corps is waiting for DEIS comments before completing the CWA Section 404(b)(1) alternatives analysis and selection of the LEDPA. In the event the anticipated alternatives analysis clearly demonstrates that Alternative 7 is not practicable and feasible, the Corps and Newhall should be prepared to consider a "hybrid" version of Alternative 7 that maintains avoidance measures to the maximum extent practicable. Increased development densities that cluster residential and commercial development in the reduced project footprint should be maximized before reducing the amount of impact avoidance areas in order to increase residential units and square footage of commercial space. The EPA is available to coordinate with the Corps and Newhall through the alternatives analysis process to identify the Preferred Alternative for the FEIS, and the LEDPA for CWA Section 404.

Recommendations:
Based on the alternatives assessed in the DEIS, the Corps should not permit Newhall's Proposed Project and instead, should select Alternative 7 or a similar "hybrid" version that maximizes avoidance of environmental resource impacts. The Spineflower Conservation Plan in Alternative 6 should be included. The FEIS should identify the Preferred Alternative and the LEDPA following coordination with the EPA.

In the FEIS, the Corps should assess Alternative 7, or a similar version that incorporates fluvial geomorphic principles to address existing unstable tributary reaches and prevent further degradation. Buffers along streams should be maximized to allow for channel migration and reduce the need for engineered stabilization structures.

Purpose and Need

The Overall Purpose and Need should be revised in order to avoid too narrow a range of reasonable alternatives. The DEIS states that the project purpose is to "practicably and feasibly achieve the basic objectives of the Specific Plan, thereby helping to meet the regional demand for housing and jobs." While we recognize that the project is intended to meet regional housing and job demands, we are concerned that the purpose of meeting the basic objectives of the Specific Plan, adopted by LA County in 2003, is too narrow and could limit the choice of reasonable alternatives. The objective of the Specific Plan is to meet growth projections by providing 20,885 homes and 20,000 jobs. Meeting this objective would automatically eliminate Alternative 7 from the reasonable range of alternatives as it only provides 17,323 residential units and reduced commercial space. The same could be true for other alternatives if reduced commercial space would not accommodate 20,000 jobs.

Recommendation:
We strongly recommend the Corps modify the project purpose and need to be less narrow.[2] We believe the purpose and need statement would be appropriate if it were to state that the overall project purpose is to help meet projected housing and job demands in the region through the development of a master planned community.

Waters of the United States

Avoid impacts to the Santa Clara River 100-year floodplain. The DEIS states that the Proposed Project would result in a net loss of 157 acres of the Santa Clara River FEMA 100-year floodplain. This would result partially due to major fill to raise existing floodplain elevations out of the designated FEMA floodplain. DEIS significance criteria for flooding focus on the potential for the project alternatives to increase flood hazards and do not include impacts to floodplains themselves. The Presidents' Floodplain Management Executive Order 11988[3] was adopted to avoid impacts associated with the occupancy and modification of floodplains. The Order specifically states that federal agencies shall provide leadership to preserve the natural and beneficial values of floodplains. While still only in draft form, the proposed update to the Floodplain Management Executive Order[4] states that federal agencies must strengthen their commitment to protecting and restoring the natural resources and functions of floodplains. It also includes a provision that federal agencies "shall avoid placing fill in the floodplain to achieve flood protection to the extent practicable." The EPA considers the loss of 157 acres of FEMA floodplain to be inconsistent with the intent of the adopted and draft Floodplain Management Executive Order 11988.

Recommendation:
The Corps should refrain from permitting a project alternative that would result in the loss of 157 acres of the FEMA floodplain and instead consider alternatives that avoid fill or increase FEMA floodplain area.

Riprap should be avoided on channel banks to the maximum extent practicable. Page 2.0-85 states that nearly 3,000 linear feet of ungrouted riprap would be used to prevent erosion at bridge abutments, stormdrain outlets, and tributary confluences. In order to inspect riprap, the LA County Department of Public Works (DPW) requires a 16-foot-wide paved maintenance road at top of bank. The EPA recognizes the need to prevent erosion at bridge abutments and outfall locations to reduce future maintenance and repair of these structures; however we strongly encourage the Corps to not permit the use of riprap to reinforce tributary confluences along the Santa Clara River, and the associated maintenance roads that would be constructed. Riprap bank protection reduces the habitat functions and values provided by natural vegetated banks and should be reserved for areas where there is little to no allowance for erosion. Roads would also

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[2] See Simmons v. U.S. Army Corps of Engineers, 120 F.3d 664 (7th Cir. 1997) (finding the Corps must demonstrate truly independent analysis in EIS of a permit applicant's proposal, even where the proposal is based on years of study and comes from a municipality);
[3] Executive Order 11988 Floodplain Management (42 FR 26951), May 24, 1977
[4] See the Environment & Energy Publishing, LLC website for a copy of the proposed draft Executive Order found at: http://www.eenews.net/public/25/11835/features/documents/2009/07/21/document_gw_01.pdf

result in the permanent removal of natural top of bank habitat at the confluences. Tributary confluences should have adequate buffers to allow erosion to occur, and any stabilization should be done using native vegetation and fluvial geomorphic methods that avoid engineered hardscape features and maintenance roads.

Recommendations:
The Corps should not approve an alternative that uses riprap and appurtenant maintenance roads to reinforce and maintain tributary confluences. The Corps should commit to approving an alternative that provides adequate buffers at tributary confluences that would allow for natural erosion to occur, or that, at a minimum, commits to using native vegetation and fluvial geomorphic methods.

The FEIS should discuss why tributaries would need to be reinforced, especially in light of the low impact development measures and stormwater controls that would be implemented by the project.

The FEIS should clarify the temporary impact zone for soil-cement installation. Page 2.0-81 of the DEIS states that soil cement construction requires an 85-foot temporary impact zone. Figure 2.0-26 illustrates a conceptual design cross-section for soil cement that would result in approximately 120 feet of temporary ground disturbance. It is unclear what width was used to determine temporary impacts to riparian and upland habitats from soil cement installation.

Recommendation:
The FEIS should clarify the approximate temporary impact zone for riparian and upland habitats and verify how the impact zone was applied to accurately determine temporary impacts.

Geomorphology and Riparian Resources

The EPA is concerned with the use of the HARC assessment tool to identify the amount and location of compensatory mitigation. To further support the impact analysis, the applicant conducted an assessment of all Corps and CDFG jurisdictional areas within the Resource Management and Development Plan (RMDP) site. The purpose of this analysis, the Hybrid Assessment of Riparian Condition (HARC), was to evaluate the relative functional quality of the jurisdictional areas within the RMDP site so that direct and indirect impacts of the proposed project could be determined and compared. The HARC utilized 15 field parameters to assess functional capacity of jurisdictional areas across three categories: biological, biogeochemical and hydrology.

EPA has long supported the use of functional or condition assessments in the Section 404 regulatory program. As a diagnostic tool, the HARC analysis is useful because it provides a relative gradient of riparian condition across the project site, with some areas having higher functional capacity over others.

Although the HARC was intended to assess functions of the jurisdictional areas, most of the indicators incorporated into the assessment are measures of riparian structure rather than processes. Measurement of these variables is assumed to be closely correlated to function. Therefore, the HARC is mainly a qualitative tool, with metrics that are subject to interpretation, rather than a tool that directly measures ecological processes.

Although we support the use of the HARC as a diagnostic tool, in its current form we do not support using the HARC to determine the amount and location of compensatory mitigation for the following reasons:

1. **Lack of reference dataset** – Wetland assessment methodologies, such as the Hydrogeomorphic Method (HGM) or the California Rapid Assessment Method (CRAM), rely heavily on a domain of reference systems to capture a range of natural functions across the landscape. This reference dataset, sensitive to regional variation in functional performance, is essential so that the structural characteristics of the site can be related to resulting function in the same subclass of wetlands within the same watershed or ecoregion. Although the HARC may be useful for assessing function in a particular hydrogeomorphic setting, because it does not incorporate a regional reference dataset, we find that it is deficient at assessing the effect of wetland mitigation at the landscape scale.

2. **Assumes functions are explicitly multiplicative** – In addition to providing a score in each of the three major categories, a "HARC Total Score" was calculated by averaging each of the 15 metric scores for each reach. The total score was then area-weighted by multiplying by the entire reach area to provide "HARC AW-Score Units". Combining functions in this way can result in certain functions being masked, thereby underestimating the importance of tributaries in a watershed and decreasing the resolution of the functional assessment. . The recent interagency implementing guidance for CRAM cautions against adding CRAM scores for individual assessment areas to get an overall average.[5] It further advises to be cautious in interpreting CRAM scores, as attribute scores might be better indicators of what is driving condition than an overall score. For example, using CRAM, a site can get an "index" score (total score) of 75 by having 25 for landscape, 25 for hydrology, 15 for physical, and 10 for biotic. Another site can have an index score of 75 by having 10 landscape, 15 hydrology, and 25 each for physical and biotic attributes. By looking only at the total score, you mask the underlying condition or functional assessment of the individual categories. If you then multiply that by area, you risk inflating the error. This practice also conflicts with one of the primary goals of the HARC which is to, "account for differences between the Santa Clara mainstem and the tributaries (DEIS 4.6.3.2.1)."

3. **Does not predict Post-Project Function-** To determine the impacts of the proposed project and alternatives, functions of the post-project drainages were predicted using the

[5] See *Using CRAM (California Rapid Assessment Method) to Assess Wetland Projects as an Element of Regulatory and Management Programs: Framework for Agency-specific Guidance*. Prepared by Southern California Wetland Recovery Project (WRP) Integrated Wetlands Regional Monitoring Program (IWRAP) Implementation Workgroup , June 30, 2008

HARC. For example, areas such as Potrero Canyon and the Santa Clara River that included newly created channels or wetlands were assigned a post-project HARC AW-Score (see Section 4.6.5). This score was based on assumptions regarding the performance and structural integrity of the mitigation area following implementation of the RMDP. EPA feels that these post-project HARC scores are unsubstantiated because the basis for these assumptions is not described in the DEIS and because the HARC is a completely new methodology, the validity of which remains unknown since it has not been tested within the Santa Clara watershed. Furthermore, the HARC does not specifically lay out design parameters that ensure the likelihood that hydrology, desired riparian vegetation, and desired animals will be reestablished or that exotics will not invade.

Recommendation:
The FEIS should clearly address the EPA's concerns with the HARC, including the lack of a reference data set, the underestimation of the importance of tributaries in the Santa Clara watershed, and post-project functional assumptions.

The DEIS provides inconsistent information regarding design and impacts of Alternative 7. Chapter 4.2 tributary descriptions for Alternative 7 include the use of creek bed grade control structures and significant narrowing of the floodplain width, similar to the Proposed Alternative. This is inconsistent with Page 3.0-127 of the DEIS, which states that, for Alternative 7, bank protection for tributaries would be outside the 100-year floodplain and that the major tributaries would not be regraded or realigned. Page 4.2-241 further states that, for Alternative 7, there will be no grade stabilizers in the tributaries, resulting in less of an effect on channel geomorphology. The inclusion of grade stabilization structures and narrowing of the floodplain width is also contrary to the figures for Alternative 7 in Chapter 3. It is our understanding from personal communication with Newhall that the Chapter 4.2 tributary descriptions are erroneous due to cut and paste errors from other alternatives, and that designs for Alternative 7 do not include grade control structures or narrowing of the floodplain.[6]

Recommendation:
The FEIS should provide a consistent and accurate description of Alternative 7 and correct any sections that include erroneous text copied from other alternative descriptions. The FEIS should clarify that, under Alternative 7, tributaries would not include grade control structures and narrowed floodplains similar to the Proposed Alternative.

Water Quality

The FEIS should commit to increasing the use of low impact development best management practices. To prevent and control hydromodification impacts to the Santa Clara River and the

[6] August 2009 phone conversation between EPA and Matt Carpenter, Director of Environmental Resources for Newhall Land and Farming Company.

tributaries from the build-out of the project, the DEIS (Section 4.4) relies on three main control strategies:

1. On-site practices such as low-impact development (LID) best management practices (BMPs);
2. Regional detention basins and;
3. In-stream stabilization techniques.

Although the DEIS provides examples of all three types of strategies, the primary method of controlling peak discharge (Q_{cap}) is by installing grade control structures and buried bank stabilization in the natural channels and newly constructed drainages. For example, in the applicant's preferred alternative, 98 grade control structures are proposed to handle peak discharge in Potrero Canyon. The channel design for Potrero Canyon does not assume any reduction in Q_{cap} from either on-site practices or regional detention basins.

The EPA believes that impacts to jurisdictional waters could be reduced by aggressively designing and implementing BMPs that promote infiltration on-site. The Newhall Ranch Specific Plan Sub-Regional Stormwater Mitigation Plan (Appendix 4.4) should include minimum performance standards and requirements that promote infiltration of post-development flows rather than relying on in-stream stabilization techniques. In its current form, the Mitigation Plan only encourages LID BMPs.

> *Recommendation:*
> The EPA recommends that BMPs be designed, installed, and maintained to infiltrate sufficient runoff volume such that post-development infiltration volume shall be at least 90 percent of the predevelopment infiltration volume, on the basis of average annual rainfall. That is, no more than a 10-percent decrease in infiltration would be allowed. In all cases, if this is not feasible, then off-site infiltration (detention basins) may be utilized to meet this requirement as part of the Sub-Regional Stormwater Mitigation Plan.

Mitigation Measure GRR-3 should be changed to avoid concrete, soil cement, and secured riprap. On page 4.2-262, mitigation measure GRR-3 calls for all outlets, bank and grade stabilization structures, bridge abutments, culverts, and other features subject to flows to be concrete, soil cement or secured riprap to ensure stability and reduce maintenance. The EPA disagrees that all such structures need to be made of armored hardscape materials. While some structures may require more erosion protection based on their location and vulnerability, others should be constructed using biotechnical methods that provide improved habitat over concrete, soil cement, and grouted riprap.

> *Recommendation:*
> Structures subject to flows should be evaluated by an experienced geomorphologist prior to designing them with concrete, soil cement, and secured riprap. Biotechnical methods and materials should be maximized where feasible. The FEIS and any Corps permit should commit to this more flexible approach.

Water Resources

The FEIS should discuss the water conservation benefits of expanding recycled water for additional uses such as toilets, and consider including infrastructure to facilitate this use now or in the future. The DEIS concludes that there is adequate water supply for all alternatives from existing and reliable sources. Demand for non-potable water for the Specific Plan, Valencia Commerce Center (VCC), and Entrada development would be largely met by the proposed Water Recycling Plant (WRP) and other recycled sources. The EPA commends Newhall for committing to meet non-potable water demands through water recycling; however, in order to further reduce potable water consumption, Newhall should consider installation of "purple pipe" infrastructure for residential and commercial development that could use recycled water for flushing toilets or any other non-potable water uses now or in the future.

The FEIS should incorporate additional water conservation measures beyond those discussed in the DEIS. The DEIS includes several water conservation measures previously adopted by LA County for the SP and the VCC but could be expanded to further reduce impacts to water resources. Additional mitigation measures not described in Section 4.3 could include maximizing the use of high water efficiency toilets, faucets, showers, and appliances in all commercial and residential developments. Variable pricing which accurately reflects the economic and environmental costs of water could also be used to influence water demand. For additional information, we recommend referring to the *USEPA Water Conservation Guidelines, Appendix A, Water Conservation Measures*.[7] Water saving strategies can be found in the EPA's publication *Protecting Water Resources with Smart Growth*.[8]

> *Recommendations:*
> The FEIS should include a discussion of potential water conservation benefits that could be achieved through the use of recycled water for other uses beyond irrigation. Installation of "purple pipes" that would enable the use of recycled water for toilets should be considered.
>
> The FEIS should include an in-depth discussion of pricing and how it could be utilized to balance water demands and water supply.

Describe potential effects of climate change on water availability. A discussion of climate change and its potential effects on water supply and reliability would better serve decision-making on this project, as well as long-term, regional water management planning and planned development.

> *Recommendation:*
> We recommend the FEIS include a qualitative discussion on climate change and the potential effects on water supply for the project. We recommend this discussion provide a

[7] EPA provides several conservation measures that utilities can use to develop water conservation plans at: http://www.epa.gov/watersense/docs/app_a508.pdf

[8] Several strategies for water resource protection are found in the EPA publication Protecting Water Resources with Smart Growth, found at http://www.epa.gov/piedpage/pdf/waterresources_with_sg.pdf.

short summary of climate change studies relevant to Southern California and their recommendations for addressing these effects.

Air Quality

The FEIS should include additional information regarding general conformity. In Section 4.7.9, the conformity determination sets forth the Corps' position regarding continuing program responsibility associated with the Project. The description of the applicable general conformity requirements in the DEIS state that "The Corps will not maintain control over those elements of the Project associated with construction and operation of facilities related to development under the Newhall Ranch Specific Plan."

The DEIS also indicates that projected emissions from the Newhall Ranch project do not exceed "emissions budgets" in the applicable State Implementation Plan (SIP), which is the 1997 South Coast Air Quality Management Plan (AQMP). Please clarify the location of the "emissions budgets" in the 1997 AQMP, provided by Jill Whynot of the South Coast Air Quality Management District (SCAQMD) as footnoted in Table 4.7-51 of the DEIS. We do not find the documentation in the general conformity determination under 40 CFR 93.158(a)(5)(i)(A) with respect to budgets in the 1997/1999 South Coast SIP to be convincing for the simple fact that the most recent SCAQMD baseline NO_x emissions estimates for on-road and nonroad source categories (i.e., the two categories affected by project construction) greatly exceed the applicable general conformity budgets from the 1997/1999 South Coast SIP (see chart below). We acknowledge that the 2007 South Coast AQMP is not yet the applicable SIP for conformity purposes because it has not been approved; nonetheless, the emissions estimates contained in the 2007 AQMP represent the most recent emissions estimates available and inform us as to the plausibility of reliance on the budget test under 40 CFR 93.158(a)(5)(i)(A).

Here is a comparison between general conformity SIP budgets for NOx and the corresponding 2007 AQMP's estimates of baseline emissions:

	Onroad		Nonroad	
Year	Applicable SIP	2007 AQMP	Applicable SIP	2007 AQMP
2002	447.1	611.3	270.7	378.1
2010	277.8	379.3	164.3	315.7

Note: The applicable SIP budgets are found on page V-4-24 in appendix V of the Final 1997 AQMP (November 1996), as amended by table 2-7 on page 2-20 of the Final 1999 Amendments to the 1997 Ozone SIP Revision for the South Coast Air Basin (December 1999). See, also, EPA's Proposed Rule at 65 FR 6091 (February 8, 2000), at 6100 and 6101 (including table 8). The most recent estimates of emissions are from tables B-1 through B-4 in appendix III of the Final 2007 AQMP. All emissions shown are for NO_x and represent summer season (tons per day).

Tables 4.7-49 and 50 incorrectly list annual NOx emission thresholds for the SCAQMD to be 10 tons per year, which is required under an "extreme" nonattainment classification. The current classification for the 8-hour ozone standard in the South Coast is "severe-17," and the applicable de minimis threshold for such areas under EPA's General Conformity regulation is 25 tons per year for VOC or NO_x. While the California Air Resources Board (CARB) has requested that EPA reclassify the South Coast from "severe-17" to "extreme," EPA has not yet taken action on this request, and thus the 25 tons per year threshold remains in effect. The decrease in the de minimis threshold from 25 to 10 tons per year for VOC or NO_x will not occur until the effective date of our final approval of CARB's reclassification request. As of this date, EPA has not yet proposed action on CARB's reclassification request.

In Section 4.7.9, end of the first full paragraph, please note that EPA approved SCAQMD's general conformity rule, Rule 1901, as part of the California SIP on April 23, 1999 (64 FR 19916) and thus the mitigation measures relied upon for general conformity determinations in the South Coast Air Basin are federally enforceable under the SIP.

In the first full paragraph on page 4.7-109, please note that the South Coast is classified as "maintenance" for NO_2.

The applicable SIP for PM_{10} is the 2003 South Coast AQMP. See EPA's proposed and final rules approving the South Coast PM_{10} SIP at 70 FR 43663 (July 28, 2005) and 70 FR 69081 (November 14, 2005), respectively. The 2003 1-hour ozone SIP was acted on, but it is not the applicable SIP because we disapproved the attainment demonstration. (see 73 FR 63408, October 24, 2008, and 74 FR 10176, March 10, 2009). For questions pertaining to air quality, please contact Wienke Tax, EPA Air Division, at (415) 947-4192, or by email at tax.wienke@epa.gov.

> *Recommendations*:
> We recommend that the Corps explain in the FEIS why it has no continuing program responsibility over operational emissions from the Project.
>
> For General Conformity, an alternative test under 40 CFR 93.158(a)(5)(i) will need to be met in order to demonstrate general conformity. In addition, the State needs to provide documentation confirming the assertion that the emissions from this project are included in the SIP.

Traffic

The FEIS should further discuss the assumption for vehicle miles traveled (VMT) for commuters who would reside at the proposed project. Page 8.0-40 in the Climate Change section states that based on the Santa Clarita Valley Consolidated Traffic Model, the average home-based trip length is 10.7 miles for work, 5.2 miles for shopping, and 7 for others. Based on personal communication, the SCAQMD estimates 16-18 mile one way commutes for residents in the LA Region.[9] This is a significant difference. The DEIS makes the assumption

[9] July 29, 2009 phone call between EPA and Roosevelt Brown, SCAQMD.

that commercial space that would be developed as part of the project would create sufficient jobs to accommodate enough project residents that VMTs for work would be reduced below the regional average. This assumption could also reduce the projected amount of automobile emissions from cars. It is unclear, based on the DEIS, how this assumption is supported; if wrong, it could artificially reduce projected automobile emissions by 33 to 40 percent compared to the regional average.

> *Recommendation:*
> The FEIS should further substantiate the assumption that commuters would only travel an average of 10.7 miles each way to work when the SCAQMD regional average is 16-18 miles.

The FEIS must ensure mitigation for impacts to traffic is adequate for a less than significant finding. According to Table 4.8-7 of the DEIS, indirect traffic impacts of the project resulting from the Specific Plan would not occur within the project site, but the level of service (LOS) would be reduced and exceed LOS significance thresholds in several off-site locations, including eleven segments of Interstate 5 and three major surface street arterials. These impacts would be greatest for the Proposed Project but according to the DEIS would be reduced to less than significant through financial contribution towards road widening and the addition of high occupancy vehicle (HOV) lanes, as described in mitigation measures TR-10 to TR-18. The EPA is concerned that mitigation measures for impacts to traffic are beyond the control of Newhall and that there is no assurance these measures would be funded by third parties, or even Newhall (for example, the mitigation measures are dependent on determining Newhall's "fair share" of funding HOV lanes, lane widening efforts, etc).[10] Because these measures would likely require a sufficient period of time for planning and separate environmental review, the DEIS does not provide assurance that they would be implemented within a timeframe that would adequately mitigate impacts of the project. Because the feasibility of mitigation measures TR-10 to TR-18 is not self-evident, the EPA believes the DEIS does not provide a rational basis for determining that the Corps has adequately complied with NEPA.[11]

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[10] See e.g, RMDP-SCP EIS/EIR, 4.8-105-106 (TR-18 - "The Project applicant shall contribute its fair-share of the costs of adding one HOV lane.") (emphasis added).

[11] See O'Reilly v. United States Army Corps of Eng'rs, 477 F.3d 225, 234 (5th Cir. 2007) (Finding in part that Corps' NEPA analysis of traffic mitigation efforts by applicant (including promise of funding improvements) was inadequate where EA provides only cursory detail as to what those measures are and how they serve to reduce those impacts to a less-than-significant level.); Wetlands Action Network v. U.S. Army Corps of Eng'r, 222 F.3d 1105, 1121 (9th Cir. 2000) (held that prospective mitigation plans satisfied NEPA's mitigation requirements where the plans were "developed to a reasonable degree"); NRDC v. United States Army Corps of Eng'rs, 457 F. Supp. 2d 198, 220 (S.D.N.Y. 2006) ("A proposed mitigation measure should be accompanied by some level of assurance as to its efficacy. An agency must study the likely effects of the measure, propose monitoring to determine how effective the planned mitigation would be, and consider alternatives in the event the measure failed. Otherwise, an agency may not rely on that mitigation measure to reduce environmental or cumulative impact below the level of significance that would require an EIS or an SEIS."); Ohio Valley Envtl. Coalition v. Hurst, 604 F. Supp. 2d 860 (2009) (Reliance on proposed mitigation for less than significant finding must satisfy two factors. "First, the proposed mitigation … "must be more than a possibility" in that it is "imposed by statute or

Recommendation:
The FEIS should include assurances that mitigation measures that reduce traffic are feasible and within the control of Newhall to fund and implement within a timeframe that would affectively offset traffic impacts.

Biological Resources

The FEIS should explain the reason for phasing conservation easements for the High Country Special Management Areas (SMA). The EPA recognizes the value of the 4,205 acres High Country SMA included in the Specific Plan Land Use Plan and commends Newhall for committing to place these acres in permanent conservation. It is unclear from the description in Section 2 why granting of the conservation easements would occur in phases of approximately 1,400 acres each as building permits are issued. As described on page 2.0-50, the first offer would occur after the 2,000th building permit is issued, the second offer after the 6,000th and the final offer after the 11,000th building permit. Why was it not determined in the Specific Plan to grant all 4,205 acres of conservation easement up front? The EPA is concerned that this conservation measure is contingent upon issuance of sufficient building permits and that the High Country HMA would not be fully realized until a certain number of building permits are offered.

Recommendation:
Additional information should be provided in the FEIS explaining the rationale for phasing in the High County SMA as building permits are issued. The FEIS should also explain how these lands will be managed in the interim prior to issuance of building permits.

Riparian areas of the Santa Clara River should be avoided. Figure 2.0-25 illustrates a large permanent riparian impact area on the north side of the Santa Clara River in proximity to the proposed Potrero Canyon Bridge. This area consists of mature native riparian vegetation and is a part of the contiguous riparian corridor along the river. The Santa Clara is Southern California's longest free-flowing river and provides important habitat for a variety of plant and animal species, including several federally and state protected species. These riparian areas are critical for several reasons, including nesting, foraging, cover, and migration, and should be preserved to the maximum extent. Even with mitigation, mature riparian habitat can take several years to replace resulting in temporal impacts to a variety of species.

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regulation or have been so integrated into the initial proposal that it is impossible to define the proposal without mitigation." [ ] Second, there must be some assurance that the mitigation measures "constitute an adequate buffer against the negative impacts that result from the authorized activity to render such impacts so minor as to not warrant an EIS." [citing Wetlands Action Network at 1121.] In other words, there must be some assurance that the proposed mitigation measures will be successful.")

Recommendation:
The Corps and Newhall should assess an alternative, in the FEIS, such as Alternative 7, that avoids impacts to riparian areas along the Santa Clara River. The FEIS should commit to avoiding the large riparian area north of the proposed Potrero Canyon Bridge.

Further avoid impacts to federally and state protected species. As described in the DEIS, several protected species and/or their habitats have been identified within the project site that would incur significant and unavoidable impacts from the Proposed Project. Based on a comparison of the different alternatives, Alternative 7 would have substantially less impact to these species and their habitats. For example, compared to the Proposed Project, Alternative 7 would:

- reduce permanent vegetation community impacts by 34.4 percent;
- reduce impacts to riparian and bog/marsh communities by 82.7 percent;
- impact 16 acres of least bells vireo habitat compared to 111 acres; and
- impact 8.5 acres of southwestern willow flycatcher habitat compared to 47 acres;

Recommendation:
Based on the conclusions of the DEIS impacts assessment on biological resources, including protected species and their habitats, the EPA concurs with the conclusion that Alternative 7 would have substantially less impacts to these resources and recommends the Corps and Newhall select Alternative 7 as the Preferred Alternative in the FEIS.

Global Climate Change

Section 8.0 of the DEIS provides a very comprehensive climate change analysis with respect to the inclusion of background information regarding current federal and state policies for greenhouse gases, and analyses of the potential impacts that the project and Specific Plan could have on climate change resulting from greenhouse gas (GHG) emissions. The document provides a rigorous analysis of potential impacts and mitigation strategies--even some strategies pertaining to factors not typically considered, such as the effect of land use changes (e.g., vegetation loss) on climate change. The EPA recognizes the level of effort that has gone into this analysis. Regardless, the DEIS estimates the project would produce over 600,000 tons per year, one time emissions, and approximately 345,000 tons per year of CO_2 equivalent emissions thereafter. We have provided the following comments that should be addressed in the FEIS:

Greenhouse gas emission reduction mitigations should refer to air quality mitigation measures in Chapter 4.7. Table 8.0-1 and Section 8.6 list several mitigation measures that would reduce GHG emissions but there does not appear to be any reference to emission reductions from construction-related mitigations as described in Chapter 4.7, Air Quality. Even though impacts to air quality would be significant, several construction mitigation measures have been provided in Chapter 4.7 that should also be considered as GHG emission reduction measures.

Recommendation:
The FEIS should clarify that mitigation measures to reduce air quality impacts from construction will also provide mitigation to reduce GHG construction emissions. If these

measures were not considered in the GHG emissions inventory for the project, the Corps should consider quantifying these reductions and including them in the FEIS.

The FEIS should be updated to accurately reflect outdated language regarding the EPA's Advanced Notice of Proposed Rulemaking (ANPR). Page 8.0-10 states that "In response to the recent U.S. Supreme Court decision, the USEPA issued an Advanced Notice of Proposed Rulemaking in July 2008, subject to a 120-day comment period, to seek further comment on the regulation of GHG emissions pursuant to the Clean Air Act. With the recent administration change, it is expected that the USEPA will adopt a new approach to climate change, particularly as President Obama has expressed his support for a nationalized cap-and-trade program; however, it is uncertain how exactly the agency will address GHG emissions."

Recommendation:
To more accurately reflect the status of the ANPR, the Corps should consider using the following language: "On July 11, 2008, EPA released an advance notice of proposed rulemaking (ANPR) to gather information and determine how to proceed. The ANPR reflects the complexity and magnitude of the question of whether and how greenhouse gases could be effectively controlled under the Clean Air Act. A "Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act" was signed on April 17, 2009."

Green Building

The FEIS should include a commitment to place individual photovoltaic systems on all residential and nonresidential buildings. Section 8.6.2 of the Global Climate Change chapter states that individual photovoltaic systems shall be considered when undertaking design and construction of residential and nonresidential buildings. This is intended to help meet mitigation measures GCC-3 and 4, which require developers to produce or purchase renewable electricity equivalent to the installation of a 2.0 kilowatt photovoltaic system for each detached single-family home or 1,600 square feet of nonresidential roof area. Mitigation measure GCC-5 also provides for the offering of a solar energy option for single-family homes under specific circumstances when the application for a subdivision map has been deemed complete on or after January 1, 2011. The EPA recognizes the importance of these measures and supports the use of renewable energy sources, including solar. To that end, we strongly encourage Newhall to maximize the use of individual photovoltaic systems on all project buildings, including multi-family units and nonresidential roof area less than 1,600 square feet. In addition, we suggest a solar option be provided to buyers for all homes, including those on land for which an application for a tentative subdivision map has been deemed complete before January 1, 2011.

Recommendation:
The FEIS should strengthen the language in mitigation measures GCC-3, 4 and 5 to maximize the installation of individual photovoltaic systems for all types of residential buildings and all sizes of nonresidential buildings in the project.

The FEIS should include commitments to maximize the use of green building design. The DEIS includes several mitigation measures that would implement green building designs.

Specifically, several of the global climate change mitigation measures for the Specific Plan and for the project are consistent with green building design standards, as are the low impact development measures for stormwater runoff. The EPA commends Newhall for committing to these measures. Based on the scale of the project, Newhall should commit to additional measures that target greenhouse gas emission reductions, energy conservation, water conservation, and indoor air quality. A list of resources is provided below. For questions on green building, please contact Leif Magnuson, EPA at (415) 972-3286 or by email at magnuson.leif@epa.gov.

ENERGY STAR Qualified Homes: To earn the ENERGY STAR, a home must meet strict guidelines for energy efficiency set by the EPA. These homes are at least 15 percent more energy efficient than homes built to International Residential Code (IRC), and include additional energy-saving features that typically make them 20–30% more efficient than standard homes. Go to http://www.energystar.gov/index.cfm?c=new_homes.hm_index for more information.

In California, energy codes are updated every 3 years and Title 24 requires buildings to exceed these codes by 15 percent. ENERGY STAR requires buildings be at least 15 percent more efficient than Title 24 requirements. Currently the DEIS mitigation measures GCC-1 and GCC-2 commit to building residential and commercial and public homes to exceed Title 24 2005 efficiency standards by 15 percent. The FEIS should be revised to reflect the most current energy code update for 2008 that will take effect January 1, 2010 (not July 1, 2009 as stated on Page 8.0-18 of the DEIS) and require a 15 percent increase in efficiency. In addition, given the potential 20-year timeframe to complete the Specific Plan, the FEIS should include a commitment to achieve ENERGY STAR status by constructing buildings that are 15 percent more efficient than the most current Title 24 standard.

> *Recommendations:*
> Newhall should commit to achieving the EPA's ENERGY STAR rating for new homes and include this commitment as a mitigation measure in the FEIS.
>
> The FEIS should be revised to commit to exceeding Title 24 2008 energy efficiency standards, effective January 1, 2010, for California by 15 percent and further commit to always exceed the most current Title 24 requirement by 15 percent for the duration of project construction.
>
> Newhall should consider attending the ENERGY STAR Qualified Homes training on September 11, 2009 at Southern California Edison's Customer Technology Application Center in Irwindale, California. In addition, the training will discuss EPA's new label called "Climate Choice" for leading edge builders willing to demonstrate an aggressive package of energy efficiency measures. More information on this training can be found at: http://www.sce.com/b-sb/energy-centers/ctac/ctac.htm.

Indoor Air Plus: EPA created Indoor airPLUS to help builders meet the growing consumer preference for homes with improved indoor air quality. EPA developed additional construction specifications to help improve indoor air quality in new homes. Go to http://epa.gov/indoorairplus/ for more information.

Water Conservation: The Shappell Homes Alamo Creek development in Danville, California implemented an aggressive conservation approach to meet the demands of the local water supplier. This was done through measures such as the use of drought tolerant native vegetation and artificial turf for playfields and was a finalist for the American Society of Landscape Architects. The Camino Tassajara, also in Danville, California, strived to achieve neutral water demands. For more information on these efforts go to http://www.sldtonline.com/content/view/67/17/, and http://www.texaswatermatters.org/pdfs/water2_richard.pdf

Additional green building resources include:

- EPA Region 9's Green Building Resources webpage: http://www.epa.gov/region09/greenbuilding/index.html
- Green Building Products: http://www.buildinggreen.com/menus/index.cfm and http://www.pharoslens.net/about/;
- The EPA's Environmentally Preferable Purchasing website: http://www.epa.gov/opptintr/epp/; and
- Low-emitting products for schools and buildings at: http://www.betterbuildingsbetterstudents.org/dev/Drupal/node/381.