UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

AUG 24 2009

Colonel Thomas H. Magness
District Engineer, Los Angeles District
U.S. Army Corps of Engineers
PO Box 532711
Los Angeles, California 90053-2325

Subject: Public Notice (PN) 2003-01264-AOA for the proposed Newhall Ranch Management and Development Plan, Los Angeles County, California

Dear Colonel Magness:

This letter is in response to your May 1, 2009 PN that describes the proposed Newhall Ranch Management and Development Plan for portions of the Santa Clara River and several adjacent tributaries, near the city of Santa Clarita, Los Angeles County, California. According to the PN, the applicant proposes to discharge dredged or fill material into approximately 82.3 acres of waters of the United States across the 12,000 acre project site. 1

The May 1, 2009 PN also provided notice of the publication of the Draft Joint Environmental Impact Statement and Environmental Impact Report (DEIS/DEIR) for the proposed project, pursuant to the National Environmental Policy Act (NEPA). EPA will provide comments on the DEIS in separate correspondence. The following comments were prepared under the authority of, and in accordance with, the provisions of the Federal Guidelines (40 CFR 230) promulgated under §404(b)(1) of the Clean Water Act (CWA). Our detailed comments on the project are enclosed.

Although the DEIS considered six separate alternatives to satisfy the requirements of NEPA, the PN did not provide information on how impacts associated with the proposed project have been avoided, minimized and compensated as required by 33 CFR 332.4(b)(1). Furthermore, the applicant has not yet prepared an 404(b)(1) Alternatives Analysis as required at 40 CFR 230.10(a). Therefore, we cannot determine whether the proposed discharge complies with the restrictions as specified in the Guidelines. 2 3

The Santa Clara River is Southern California's longest free-flowing river. The Santa Clara is home to 12 federally endangered plant and animal species and another 25 species of special concern. The river also supports an aquifer that provides drinking water to half of the residents in the Santa Clarita Valley. For these reasons, we are defining the Santa Clara River as an aquatic resource of national importance. Several of the drainages in the Newhall Ranch project area are significant tributaries to the Santa Clara River that provide important watershed functions (e.g., aquatic habitat, water and sediment supply 4 5

and retention, and groundwater recharge). Modifications of these tributaries have the potential to cause adverse impacts to the Santa Clara River. Given the available information and the potential impacts to the Santa Clara River and its tributaries, EPA has determined that the project, as presently proposed, may result in significant and unacceptable impacts to aquatic resources of national importance and therefore recommends denial of the project. This letter follows the field level procedures outlined in the August 1992 Memorandum of Agreement between the EPA and the Department of Army, Part IV, paragraph 3(a) regarding §404(q) of the CWA.

5 Continued

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Thank you for the opportunity to provide comments on this project. We look forward to working with the Los Angeles Corps District and the applicant to resolve the important environmental issues concerning the proposed project. If you wish to discuss this matter further, please call me at (415) 972-3572, or have your staff contact David W. Smith, Chief of our Wetlands Office, at (415) 972-3464.

Sincerely,

24 Aug. 2009

Alexis Strauss, Director
Water Division

Cc:

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From: Raffini.Eric@epamail.epa.gov [mailto:Raffini.Eric@epamail.epa.gov]
Sent: Tuesday, August 25, 2009 1:22 PM
To: Aaron.O.Allen@spl01.usace.army.mil
Cc: Matt Carpenter; lnye@waterboards.ca.gov; chris_dellith@fws.gov; vcarrillo@rb4.swrcb.ca.gov; Amato.Paul@epamail.epa.gov; Smith.DavidW@epamail.epa.gov; dbedford@dfg.ca.gov
Subject: EPA comments on Corps' Public Notice for Newhall Ranch

Hi Aaron,

Attached you will find our comments on the Corps' Public Notice for the 404 permit for Newhall Ranch. Our comments on the DEIS will be coming in a few days. A hard copy is also in the mail. Thanks.

Eric

Eric Raffini, Environmental Scientist
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DETAILED PROJECT COMMENTS

I. Project Description

The Newhall Ranch Project is a master-planned development encompassing approximately 12,000 acres along the Santa Clara River ("the River") in unincorporated Los Angeles County. The applicant proposes to develop approximately 2,550 acres of the site for residential, commercial and industrial purposes. The applicant's proposed project includes the construction of 22,610 homes (in four separate villages), seven schools, a golf course, and a water reclamation plant. 7

The entire project area supports approximately 636 acres of waters of the United States, including 251 acres of wetlands, according to the preliminary jurisdictional determinations performed by the Corps to date. The majority of the jurisdictional waters on the site are located along the River. The site also includes several major tributaries that flow from the steep headwater areas down through the project to the River. As proposed by the applicant, the project would result in the destruction of approximately 82.3 acres of waters from direct discharges of fill material. Nearly 95% of the permanent impacts will occur in the ephemeral tributaries and small drainages that flow through the site. To create development areas, fill material from the surrounding upland areas would be placed into the valleys and canyons. New drainages and channels with grade control structures would be recreated on top of this fill material. Additionally, 59,845 linear feet of drainages would be converted to underground storm drain. Excluding the Salt Creek Open Area, the applicant proposes to fill approximately 79% of the natural tributaries on the project site. 8

II. Project Purpose

A key issue is whether the Corps' adoption of applicant's project purpose – implementation of the Newhall Ranch Resource Management and Development Plan (RMDP) – as the overall project purpose will allow it to adequately consider practicable alternatives to the Project design under CWA section 404(b)(1). 9

EPA understands the Corps has not yet concluded its alternatives analysis pursuant to the CWA Section 404(b)(1) guidelines, and that the alternatives analysis is to be completed concurrently with the EIS/EIR on the broader Newhall Ranch Specific Plan (Specific Plan), of which the RMDP is described as a component, and will be provided as an appendix in the Final EIS/EIR.[1] EPA nevertheless believes it useful to provide our comments on the overall project purpose at this stage in the permit review process because the Corps acknowledges in its PN that this NEPA alternatives analysis will "provide the basis for the 404(b)(1) alternatives analysis."[2] Thus, EPA anticipates the 10

[1] RMDP-SCP EIS/EIR, (Executive Summary) ES-12.

[2] PN at 5 ("To satisfy the requirements of NEPA and provide the basis for the 404(b)(1) alternatives analysis, a total of six alternatives are being considered .... In consideration of the 404(b)(1) Guidelines, the five project alternatives were designed to increase the level of avoidance and minimization of impacts to waters of the United States, including wetlands.")

Corps' adoption of the overall project purpose in this EIS/EIR will likely be consistent when the Corps completes its 404(b)(1) analysis. 10 Continued

Pursuant to the 404(b)(1) Guidelines, there is a rebuttable presumption that practicable alternatives that do not involve special aquatic sites or are not water dependent are presumed to be available and "presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise."[3] The Corps' burden in finding the least environmentally damaging practicable alternative under the CWA Guidelines is "heaviest" for non-water dependent projects planned for a special aquatic site, such as a wetlands area. Because of this heavy presumption, the Corps may not issue a 404 permit unless the applicant, with independent verification by the Corps, provides detailed, clear and convincing information proving that an alternative with less adverse impact is "impracticable." 11

The Corps is required to take the applicant's purpose into adequate regard, and may consider local plans, such as the Specific Plan approved by the Los Angeles County Board of Supervisors in 2003, in its decision-making. On the other hand, the Corps must ensure that the overall project purpose is not so narrow that is constrains the alternatives analysis performed pursuant to the 404(b)(1) Guidelines. 12

From an overall review of the planning documents the applicant's overall project purpose may best be described as development of a master-planned community.[4] As such, it is not water dependant but does contain special aquatic sites, e.g., the alkali marsh areas in Potrero Canyon.[5] The EPA thus encourages the Corps to steer the project toward alternatives that do not involve discharges into these special aquatic sites. Currently, all of the applicants' build alternatives would impact special aquatic sites to some degree. Only Alternative 7 shows avoidance of most impacts. 13 14

EPA is concerned the DEIS relies on an overall project purpose that is narrowed to a development consistent with implementation of the RMDP.[6] While the RMDP is described as a "a conservation, mitigation, and permitting plan for sensitive biological resources",[7] the applicant acknowledges that "[t]he RMDP also includes development-related infrastructure projects in the Santa Clara River and its tributary drainages that are 15

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[3] 40 C.F.R. § 230.10(a)(3).

[4] RMDP-SCP EIS/EIR, ES-10 ("The [RM&D Plan] would allow for the build-out of about 5.5 million square feet of commercial uses on 258 acres, and the development of approximately 643 acres devoted to uses such as community parks, neighborhood parks, a golf course, a community lake, new elementary, junior high and high schools, a library, electrical substation, fire stations, and a 6.8 million gallon per day water reclamation plant.")

[5] RMDP-SCP EIS/EIR, 4.6-8, 11.

[6] RMDP-SCP EIS/EIR, ES-11.("The overall purpose/objective of the Project is to implement the approved Newhall Ranch Specific Plan, and thereby help to meet the regional demand for jobs and housing in Los Angeles County; and, at the same time, implement the [RM&D Plan] to address the long-term management of sensitive biological resources and develop infrastructure needed to implement the approved Specific Plan.") (emphasis added).

[7] RMDP-SCP EIS/EIR, ES-1.

needed to implement the approved Specific Plan."[8] The DEIS further provides that "[i]f the [RMDP] is approved ... development associated with the approved Specific Plan would be facilitated."[9] Consequently, EPA believes that a more accurate description of the overall project purpose would encompass these broader plans as set forth in the Specific Plan. A broader statement of purpose, such as "construction of a large scale, high density housing and commercial project" might suffice. 15 Continued

III. Mitigation Sequencing

The basic premise of the 404 permitting program is that no discharge of dredged or fill material into waters of the United States shall be permitted if (1) a practicable alternative exists that is less damaging to the aquatic environment, or (2) the discharge would cause the nation's waters to be significantly degraded. In order for a project to be permitted, it must be demonstrated that, to the extent practicable, steps have been taken to avoid impacts to wetlands and other aquatic resources, potential impacts have been minimized, and compensation will be provided for any remaining unavoidable impacts. This process is commonly referred to as the mitigation sequencing requirement of the 404 regulatory program. 16 17

Avoidance is the first step in the sequencing process by which the Corps determines whether or not the applicant's proposed project is the least environmentally damaging practicable alternative (LEDPA). The Guidelines state: 18

> *...no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem so long as the alternative doe not have other significant adverse environmental consequences.*

Seven alternatives were analyzed in the DEIS jointly issued by the Corps and the California Game and Fish Department (CDFG), with varying levels of avoidance and impacts analyzed in accordance with the NEPA. The applicant's preferred NEPA alternative (Alternative 2) in the EIS would result in the greatest amount of permanent impacts (82.3 acres) and does not appear to follow the sequencing process. EPA strongly believes that further avoidance of waters of the United States is necessary prior to formulation of the LEDPA. 19 20

IV. 404 (b)(1) Alternatives Analysis & Determination of the LEDPA

Although both NEPA and Section 404 require a range of alternatives be considered and analyzed during the environmental process, the requirements of the different regulations differ slightly. NEPA regulations require that an EIS rigorously explore and objectively evaluate "all reasonable alternatives," while the 404(b)(1) Guidelines require the consideration of "practicable" alternatives. The Guidelines define "practicable" as available and capable of being done, taking into account cost, existing technology, and 21

[8] RMDP-SCP EIS/EIR, ES-6.
[9] RMDP-SCP EIS/EIR, ES-9.

logistics. Although the DEIS examined five additional project alternatives that had permanent impacts ranging between 11.4 acres in Alternative 7 to 71 acres in Alternative 3, it is unclear at this point whether these alternatives are "practicable" under Section 404. 21 Continued

From discussions with your staff, we understand that the applicant has not finished preparing the 404(b)(1) Alternatives Analysis for the proposed project. It has long been the position of EPA Region 9, that in order for the analysis of practicable alternatives under Section 404 to serve its intended purpose as a planning and screening tool, the analysis must be applied by potential permit applicants as early in the planning phases of their projects as possible. EPA would like the opportunity to review and provide comments on the 404(b)(1) alternatives analysis when this document becomes available. 22

The NEPA process includes alternative development and analysis leading to the identification and selection of a preferred alternative. However, the NEPA preferred alternative must also be considered the LEDPA for the Corps to proceed with authorization under the CWA. The LEDPA, as defined in 40 CFR Part 230.10(a), is the alternative with the least impacts to the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences. 23

V. Aquatic Resources of National Importance

The Santa Clara River is an Aquatic Resource of National Importance (ARNI) because it is Southern California's longest free-flowing river and is home to 12 federally endangered plant and animal species plus another 25 species of special concern. The River also supports an aquifer that provides drinking water to half of the residents in the Santa Clarita Valley. 24

The impacts to the River may be significant and unacceptable. First, the applicant's proposed Project alternative (as provided in the DEIS) would result in a net loss of 157 acres of the River's FEMA 100-year floodplain (as well as nearly 4.43 acres of permanent impacts to the River itself associated primarily with bridge crossings).[10] This would result partially due to major fill to raise existing floodplain elevations out of the designated FEMA floodplain. DEIS significance criteria for flooding focuses on the potential for the project alternatives to increase flood hazards and does not include impacts to the River's floodplains themselves. The Presidents' Floodplain Management Executive Order 11988[11] 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, a newly proposed Floodplain Management Executive Order states that federal agencies must strengthen their commitment to protecting and restoring the 25 26

[10] RMDP-SCP EIS/EIR 4.6-51.
[11] Executive Order 11988 Floodplain Management (42 FR 26951), May 24, 1977

natural resources and functions of floodplains.[12] 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 Orders.

26 Continued

Second, the applicant's proposed Project alternative poses significant and potentially unacceptable impacts to the River as result of proposed impacts to the River's ephemeral and intermittent streams and tributaries, which provide a wide range of functions that are critical to the health and stability of the River. These tributaries provide hydrologic connectivity within the watershed, linking ephemeral, intermittent, and perennial stream segments, thereby facilitating the movement of water, sediment, nutrients, debris, fish, wildlife, and plant propagules throughout the Santa Clara watershed. In general, the processes that occur during ephemeral and intermittent stream flow include dissipation of energy as part of natural fluvial adjustment, and the movement of sediment and debris. Ephemeral and intermittent streams are responsible for a large portion of basin ground-water recharge in arid and semi-arid regions such as this one through channel infiltration and transmission losses. These stream systems contribute to the biogeochemical functions of the River and its watershed by storing, cycling, transforming, and transporting elements and compounds.[13]

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Ephemeral and intermittent streams also support a wide diversity of plant species, and serve as seed banks for these species. Because vegetation is more dense than in surrounding uplands, ephemeral and intermittent streams provide habitat, migration pathways, stop-over places, breeding locations, nesting sites, food, cover, water, and resting areas for mammals, birds, invertebrates, fish, reptiles and amphibians. Here, as in other arid and semi-arid regions, the variability of the hydrological regime is the key determinant of both plant community structure in time and space and the types of plants and wildlife present in the ephemeral and intermittent streams at issue, as well as the River itself.

Ephemeral and intermittent streams in arid and semi-arid regions have distinctly different characteristics from perennial streams that are in wetter, more humid (mesic to hydric) environments. These complex systems have developed in a climatic regime of wide fluctuations of precipitation, ranging from drought to flood. Anthropogenic uses, such as urbanization, superimposed on that climatic regime can exacerbate or ameliorate their effects on soils and vegetation, and may affect hydrologic and ecological functions throughout the watershed. Stability and resiliency to disturbance are important for ecological integrity, but because of the deficiency of water, terrestrial arid and semi-arid region ecosystems do not recover quickly from human-imposed disturbance. Thus, EPA

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[12] See the Environment & Energy Publishing, LLC website for a copy of the proposed draft Executive Order 11988 found online at: http://www.eenews.net/public/25/11835/features/documents/2009/07/21/document_gw_01.pdf

[13] See Levick, L., J. Fonseca, D. Goodrich, M. Hernandez, D. Semmens, J. Stromberg, R. Leidy, M. Scianni, D. P. Guertin, M. Tluczek, and W. Kepner. 2008. *The Ecological and Hydrological Significance of Ephemeral and Intermittent Streams in the Arid and Semi-arid American Southwest.* U.S. EPA and USDA/ARS Southwest Watershed Research Center, EPA/600/R-08/134, ARS/233046, 116 pp.

would expect the amount and scope of permanent fill proposed by the applicant to significantly impact the hydrologic and ecological functions of the ephemeral and intermittent streams at issue, as well as the River itself. 28 Continued

Relatively intact low-order ephemeral streams with adequate buffers, such as the ones proposed to be filled by the applicant, perform a diversity of hydrologic, biogeochemical and habitat support functions that directly affect the integrity and functional condition of higher-order waters downstream, such as the River. Collectively, ephemeral and intermittent tributaries serve as the filtering headwaters for the primary sources of drinking water, and their coarse beds allow water infiltration that recharges groundwater aquifers. Healthy ephemeral waters with characteristic plant communities control rates of sediment deposition and dissipate the energy associated with flood flows to, e.g., downstream waters such at the River. The loss of these waters results in increased need for costly and often environmentally undesirable flood control facilities (such as the one proposed by the applicant for the River), as well as the increased need for drinking water and wastewater treatment infrastructure. 29

The goal of the CWA is to maintain and restore the physical, chemical, and biological integrity of the nation's waters. Ephemeral streams constitute a critical component of stream, river, and wetland systems throughout the United States, especially in the arid west where ephemeral systems are the primary characteristic of many watersheds. These systems provide important services, both to public health and the economy that our region depends upon. Impacts to ephemeral streams have largely been either unmitigated or mitigated out-of-kind, and a significant loss of headwater streams in many watersheds of the arid southwest has incrementally occurred. Ephemeral streams are, more than ever, of critical value regionally, and their support of human health and the economies of the west underscore their national importance. 30

In short, the Newhall Ranch project, as it is currently described in the PN, poses significant and unacceptable impacts to the River because it permanently removes much of the River's floodplain, and because the Project will both cause and contribute to the significant degradation and/or elimination of functions and values of the reach of the River that flows through the Project area by permanently impacting a significant portion of its tributaries, including Potrero Canyon, the impacts to which are discussed specifically below. The range and severity of environmental consequences resulting from the Newhall Ranch project to the River's aquatic environment are substantial and unacceptable and are contrary to the goals of the CWA. 31 32

VI. Potrero Canyon

EPA is particularly concerned about the applicant's proposed development and impacts to Potrero Canyon, a River tributary, where 40% (32.73 acres) of the permanent impacts to aquatic resources from the proposed project will occur. According to the DEIS, Potrero Canyon contains 37.9 acres of waters of the United States including 6.52 acres of wetlands. The wetlands in Potrero Canyon include a rare, difficult to replace cismontane alkali marsh located in the lower portion of the Canyon. The 404 regulations establish a 33 34

rebuttable presumption that, "where a discharge is proposed for a special aquatic site, all practicable alternatives to the proposed discharge which do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem." 34 Continued

Under the applicant's preferred proposed project, nearly all of stream channel that flows through Potrero Canyon will be placed under 6 to 25 feet of fill material and a new channel will be constructed on top of this material. The new channel will be bound by 32,530 linear feet (lf) of buried bank stabilization and will include 98 grade control structures and 5 bridge crossings. In addition, 10,918 lf (7.15 acres) of the stream in the headwater areas will be converted to underground storm drain. The wetland at the downstream end of Potrero Canyon would likely become hydrologically isolated from the active stream system and would likely not persist due to this interruption. 35

According to the results from the Hybrid Assessment of Riparian Condition (HARC) that was conducted on 57 stream reaches and across the study area (including the Santa Clara River), Potrero Canyon had the highest average HARC total score (.82) of all the major drainages (including the Santa Clara River). This is score is even higher than the Salt Creek Open Area that had been used as a reference site for many of the geomorphic assessments. Using the post-project assumptions that were developed for the HARC, after implementation of the applicant's proposed project, Potrero Canyon will lose 15.86 HARC Average Weighted Total Score Units. Although the Corps has proposed to mitigate for this loss elsewhere in the project area (at Salt Creek and/or along the Santa Clara River), under the mitigation ratios specified in Mitigation Measure BIO-2 of the DEIS, the CDFG would require 74.91 acres of mitigation for the impacts to Potrero Canyon. After construction of the new channels, there would remain a deficit of 52.8 acres that would mitigated through creation, preservation, enhancement of jurisdictional areas at an off-site location. 36

EPA strongly believes that further avoidance is necessary in Potrero Canyon since it will be difficult, if not impossible to replace and mitigate for both the lost cismontane alkali wetland and the ephemeral tributary in this area. The Corps has not yet provided the science or evidence of prior experience that is required to support the conclusion that the new streams would replace the functions and values of the wetlands and tributaries proposed to be filled and buried.[14] We are also concerned about the sustainability of creating ephemeral streams on top of fill material, since the survival of the riparian vegetation may not persist as it will be further separated from existing groundwater supplies. Most importantly, we are concerned about the impacts to the River caused by the potential loss of these special aquatic sites in Potrero Canyon for the reasons discussed in Section IV above. 37 38 39 40

[14] Ohio Valley Environmental Coalition v. USACOE, 479 F. Supp. 2d 607, 65 ERC 1234 (S.D.W.V. 2007) (Corps was arbitrary and capricious to conclude that mitigation plan that would replace filled stream with artificial streams called for a finding of no adverse impacts where Corps had no science or prior experience to support conclusion that article streams constructed out of abandoned sediment ditches would replace the functions and values of the headwaters systems being destroyed)

VII. Summary

Prior to granting a permit pursuant to Section 404 of the CWA, the Corps must determine that the project complies fully with EPA's 404(b)(1) Guidelines and the project is not contrary to the public interest.

At this point, there is not sufficient information to determine whether the proposed discharge complies with the substantive requirements in the regulations related to alternatives analysis, water quality, endangered species, significant degradation, and/or mitigation. Based on the information presented to date, the applicant has not demonstrated that the project complies with any of the restrictions to discharges under the Guidelines.

Once the applicant completes a 404(b)(1) alternatives analysis for the proposed project, EPA would like the opportunity to review and provide comments on this document. We must therefore reaffirm our conclusion that there is presently insufficient information to make a finding of compliance, and we urge you to deny the application.

004. Letter from Alexis Strauss, U.S. Environmental Protection Agency (USEPA) -- Water Division, dated August 24, 2009

Response 1

This comment serves to introduce the remainder of the comment letter. The comment states that the document being commented on is the U.S. Army Corps of Engineers (Corps) Public Notice (PN), and indicates that the U.S. Environmental Protection Agency (USEPA) will comment on the Draft EIS/EIR in separate correspondence. The comment also restates some basic information contained in the PN related to the size of the Project site and quantity of fill proposed, and indicates the legal authority under which the comments are being provided. The comment does not address the adequacy of the environmental review provided by the Draft EIS/EIR. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is provided.

Response 2

The comment states that although six build alternatives were included in the EIS/EIR to satisfy the National Environmental Policy Act (NEPA), the PN did not document how the proposed Project's impacts have been avoided, minimized, and compensated for as required by the Corps' regulations. The requirement to include a statement in the PN regarding the applicant's avoidance, minimization, and compensation comes from the Mitigation Rule issued on April 10, 2008, effective June 10, 2008. The Mitigation Rule does not apply to applications filed before that date. Since the applicant filed its application in 2003, the Mitigation Rule does not apply. As stated in the preamble to the rule, "[t]his final rule will apply to permit applications received after the effective date of this rule, unless the district engineer has made a written determination that applying these new rules to a particular project would result in a substantial hardship to a permit applicant. . . . Permit applications received prior to the effective date will be processed in accordance with the previous compensatory mitigation guidance." (73 Fed. Reg. 19608 (April 10, 2008).) Accordingly, there was no requirement for the Corps to document such information in the PN.

However, the Draft EIS/EIR was available for review at the time of the PN, making multiple sources of detailed information about the Project available for public inspection simultaneously. The alternatives evaluated in the EIS/EIR included the No Action/No Project Alternative required by NEPA and the California Environmental Quality Act (CEQA), the applicant's proposed Project alternative, and five additional "build" alternatives featuring increasing levels of resource avoidance and impact minimization. These seven alternatives were described in **Section 3.0**, Description of Alternatives, of the Draft EIS/EIR, and the impacts of each alternative on the environment were disclosed and evaluated in the Draft EIS/EIR, **Section 4.0**, Environmental Impact Analysis of Alternatives and Mitigation. As stated in the Draft EIS/EIR, the on-site alternatives were selected based on the ability to accomplish most of the basic project objectives while avoiding or minimizing impacts to jurisdictional waters and streams, and to populations of the state-listed endangered San Fernando Valley spineflower within the Project area.

Based on the data presented in revised **Section 4.6**, Jurisdictional Waters and Streams of the Final EIS/EIR, the proposed Project alternative would avoid permanent impacts to 86 percent of all waters of the United States within the Resource Management and Development Plan (RMDP) site, including 256.4 of 276.9 acres of special aquatic sites, 97 percent of the Santa Clara River mainstem, and 59 percent of

tributary drainages within the RMDP site. Priority areas for avoidance were determined based largely on the quality of the resources present, and the areas avoided by the proposed Project and alternatives are among the highest quality sites within the Project area. The Middle Canyon Spring Complex (Hybrid Assessment of Riparian Condition (HARC) Reach MI-6), which scored the highest in the HARC assessment, would be avoided under all alternatives, and the cismontane alkali marsh wetland at the downstream end of Potrero Canyon would be avoided by all except Alternative 2. The least impactful alternative evaluated, Alternative 7, would avoid permanent impacts to 98 percent of waters of the United States site wide, including 273.7 of 276.9 acres of special aquatic sites, all areas mapped as Federal Emergency Management Agency (FEMA) 100-year floodplains on site, and 95 percent of tributary drainages within the RMDP site. In summary, site-wide avoidance of permanent impacts to waters of the United States ranges from 86 to 98 percent among the alternatives evaluated in the EIS/EIR.

Although the seven alternatives evaluated in the Draft EIS/EIR represent a reasonable range of alternatives, two additional alternatives have been included in the Corps' draft 404(b)(1) alternatives analysis, presented in **Appendix F1.0** of this Final EIS/EIR.[1] (See draft 404(b)(1) alternatives analysis found in **Appendix F1.0** for a discussion of alternatives and the process utilized to identify the draft Least Environmentally Damaging Practicable Alternative (Draft LEDPA)). The Draft LEDPA would avoid permanent impacts to approximately 90 percent of all waters of the United States within the RMDP site, including 269.2 of 276.9 acres of special aquatic sites, 99 percent of the Santa Clara River mainstem, and 67 percent of tributary drainages.

Response 3

As stated in the comment, the USEPA cannot make a final determination regarding whether the proposed discharge complies with the Clean Water Act (CWA) section 404(b)(1) Guidelines (hereinafter 404(b)(1) Guidelines) until it receives the Corps' 404(b)(1) alternatives analysis for the proposed Project. The Corps' draft 404(b)(1) alternatives analysis has been sent to USEPA for its review prior to the Corps' decision on the proposed Project, and is included in this Final EIS/EIR (Final EIS/EIR, **Appendix F1.0**).

Response 4

The comment states that the Santa Clara River is Southern California's longest free-flowing river, and that the river constitutes an Aquatic Resource of National Importance (ARNI) due to its supporting numerous federally-listed and otherwise sensitive plants and wildlife species, and because the river supports an aquifer which provides drinking water to half of the residents in the Santa Clarita Valley. The Corps acknowledges USEPA's determination and will comply with the elevation procedures stipulated in the August 1992 Memorandum of Agreement between USEPA and the Department of Army regarding section 404(q) of the CWA. The comment does not address the adequacy of the environmental review provided by the Draft EIS/EIR. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue, no further response is provided.

[1] This analysis is herein referred to as the 404(b)(1) alternatives analysis.

Response 5

The comment states that several of the drainages within the Project area are significant tributaries of the Santa Clara River and that modification of these tributaries would have potential to adversely impact the River. The Draft EIS/EIR noted such potential impacts and proposed numerous mitigation measures and alternatives to either reduce or avoid those impacts. (See Final EIS/EIR, revised **Section 4.2**, Geomorphology and Riparian Resources, and revised **Section 4.6**, Jurisdictional Waters and Streams. In addition, please also see the Corps' draft 404(b)(1) alternatives analysis found in **Appendix F1.0** of the Final EIS/EIR.)

Response 6

This comment references USEPA's current recommendation regarding the proposed Project. However, the comment does not address the substance of the Draft EIS/EIR, and, therefore, does not require a further response. The Corps' draft 404(b)(1) alternatives analysis has been sent to USEPA for its review prior to the Corps' decision on the proposed Project, and is included in this Final EIS/EIR (Final EIS/EIR, **Appendix F1.0**).

Response 7

The comment restates information contained in the PN related to the build characteristics of the proposed Project and the acreages of existing waters of the United States and wetlands within the Project area. The comment does not address the content or adequacy of the PN. The comment does not address the adequacy of the environmental review provided by the EIS/EIR. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed Project. However, because the comment does not raise an environmental issue, no further response is provided.

Response 8

The comment presents quantitative descriptions of the proposed Project's impacts on waters of the United States, which appear to have been calculated based on the information presented in the Draft EIS/EIR. Because the comment does not address the adequacy of the environmental review provided by the Draft EIS/EIR, no further response is provided.

Response 9

The comment states that a "key issue" is whether the applicant's project purpose is too narrow to allow adequate consideration of practicable alternatives. A CWA section 404(b)(1) alternatives analysis involves specific considerations that may warrant the use of an overall project purpose different from the project purpose used in a NEPA document. In particular, the overall project purpose used for a 404(b)(1) alternatives analysis must avoid defining the proposed project so narrowly as to preclude consideration of alternatives that may be practicable, and should be tailored to the activities covered by the Corps permit. The overall project purpose defined by the Corps in the draft 404(b)(1) alternatives analysis (**Appendix F1.0**), in consideration of the applicant's stated project purpose reflects this concern.

The Corps' overall project purpose is provided below, as excerpted from **Appendix F1.0**:

> "The 'overall project purpose' is the development of a master planned community with interrelated villages in the vicinity of the Santa Clarita Valley in northwestern Los Angeles County that achieves the basic objectives of the Specific Plan by providing a broad range of land uses of approximately the same size and proportions as approved in the Specific Plan, including residential, mixed-use, commercial and industrial uses, public services (schools, parks, *etc.*), and a water reclamation plant. "

Defining the overall project purpose is a critical step in the alternatives analysis, because the overall project purpose is used to evaluate what alternatives are practicable. (See 40 C.F.R. § 230.10(a)(2) defining practicability "in light of overall project purposes.") The Corps has the final responsibility to define the overall project purpose, but in doing so the Corps should give some deference to the objectives of the applicant. A number of courts have explained that "it would be bizarre if the Corps were to ignore the purpose for which the applicant seeks a permit and to substitute a purpose it deems more suitable." *Sylvester v. U.S. Army Corps of Engineers*, 882 F.2d 407, 409 (9th Cir. 1989) (quoting *Louisiana Wildlife Federation v. York*, 761 F.2d 1044, 1048 (5th Cir. 1985)).

While the Corps needs to consider the applicant's project purpose, it also has a responsibility to ensure that the statement of overall project purpose is specific enough to allow meaningful analysis of the practicability of alternatives, but not so narrow as to exclude alternatives unnecessarily, "thus mak[ing] what is practicable appear impracticable." *Sylvester*, 882 F.2d at p. 409. Therefore, elements included in the project purpose and used to evaluate alternatives must be "necessary" and "legitimate," not merely "incidental" to the basic project purpose.[2] *Id*.

A number of cases involving the issuance of section 404 Permits help to explain the distinction between "legitimate" and "incidental" elements of the overall project purpose. These cases demonstrate that an overall project purpose may legitimately include location-specific or even site-specific elements that foreclose some alternatives when, for example:

- **The project is intended to serve a specific community.** *E.g.*, *Great Rivers Habitat Alliance v. Army Corps of Engineers*, 437 F.Supp. 2d 1019 (E.D. Mo. 2006) (finding that project purpose properly limited alternatives to sites within city of St. Peters, Missouri, where project was intended to accommodate economic development of city); *Butte Environmental Council v. U.S. Army Corps of Engineers*, 2009 WL 497575, No. 2-08-cv-1316 (E.D. Cal. 2009) (project purpose was to construct a medium to large sized regional business park with associated roads, utilities and infrastructure within the City of Redding's sphere of influence); *Stewart v. Potts*, 996 F. Supp. 668 (S.D. Tex 1998) (project purpose was to provide an affordable, quality public golf course for the citizens of Lake Jackson); *USACOE Permit Elevation Decision, Old Cutler Bay Associates* (Oct. 9, 1990) (acceptable project purpose was to construct a viable, upscale residential community with an associated regulation golf course in the South Dade County area).

- **The project is intended to complement a particular development in a specific location or to redevelop a specific site.** *E.g.*, *Sylvester v. United States*, 882 F.2d 407 (9th Cir. 1989) (project purpose was to construct an 18-hole, links style, championship golf course and other recreational

[2] Put another way, the Corps may not allow components of a project that are merely incidental to the basic project purpose to "control the Corps' decision-making process." *Florida Clean Water Network v. Grosskruger*, 587 F. Supp. 2d 1236, 1246 (M.D. Fla. 2008).

amenities in conjunction with the development of the proposed Resort at Squaw Creek); *Friends of the Earth v. Hintz*, 800 F.2d 822, 833 (9th Cir. 1986) (project purpose was to develop an area adjacent to sawmill and dock as a "log storage and sorting area"); *Nat'l Wildlife Federation v. Whistler*, 27 F.3d 1341 (8th Cir. 1994) (project purpose was to provide boat access to a particular residential development).

- **The project relies on resources or infrastructure found in a certain location.** *E.g.*, *Northwest Environmental Defense Center v. Wood*, 947 F.Supp. 1371 (D. Or. 1996) (proximity of educated labor pool, transportation infrastructure, and other amenities justified limiting geographic scope of analysis to alternative within the area of Eugene, Oregon).

Likewise, a project purpose may legitimately include elements that constrain the size and configuration of a project when, for example:

- **The elements are necessary for consistency with planning decisions made by the local or regional land use authority.** *E.g., Florida Clean Water Network*, 587 F.Supp. 2d at pp. 1244-1247 (Corps' project purpose properly included consistency with comprehensive local and regional planning efforts).

In contrast to these examples, elements that are merely incidental to a project purpose include:

- **The exact number of residential units to be included in a development, or the identity of the designer of a golf course.** *USACOE Permit Elevation Decision, Old Cutler Bay Associates* (Oct. 9, 1990).

- **The development of a *single* source of water to supply *both* a city and an adjacent water district.** *Simmons v. U.S. Army Corps of Engineers*, 120 F.3d 664 (7th Cir. 1997) (finding that the Corps should have considered alternatives that involved the development of separate sources, because the use of a single source was not essential to the objective of supplying both users with water).

- **The exact view of a waterway from a particular parcel on which an applicant proposed to build a home.** *Schmidt v. U.S. Army Corps of Engineers*, 2009 WL 579412, No. 2-08-cv-0076 (W.D. Mich. 2009) (finding that the precise view offered by the proposed site was not essential to the project purpose of building a home).

The Corps, in consideration of the applicant's stated project purpose, has carefully considered the above authorities in arriving at the statement of overall project purpose. The statement of overall project purpose differs from the NEPA statement of project purpose in three important ways.

First, the Corps' overall project purpose omits the element (found in the Draft EIS/EIR project purpose) of providing a spineflower preserve sufficient to comply with the California Endangered Species Act (CESA). From the standpoint of the draft 404(b)(1) alternatives analysis, the spineflower preserve is not an essential element of the Project itself. Rather, the Project needs to comply with CESA and potential impacts to spineflower are appropriately considered as "other significant environment consequences," which can prevent an alternative from being the LEDPA. For this reason, the overall project purpose

statement treats CESA compliance related to spineflower in the same manner as it does compliance with the federal Endangered Species Act (ESA) and other compliance requirements.

Because the spineflower is a listed species under CESA, any development that results in take of spineflower must obtain authorization to do so under CESA and must fully mitigate its impacts to spineflower. The measures needed to comply with CESA are an important element of the proposed Project, because the proposed Project cannot proceed without them. They may affect the configuration and practicability of the proposed Project, because areas set aside for spineflower would not be available for proposed Project infrastructure and facilities. However, for purposes of the draft 404(b)(1) alternatives analysis it is not appropriate to include these measures in the overall project purpose. They are more properly viewed as requirements imposed on the proposed Project by regulatory programs -- similar to other regulatory requirements that the proposed Project is obligated to meet. For example, because the Project site provides habitat for wildlife species listed as endangered or threatened under the federal ESA, the Corps will consult with the U.S. Fish and Wildlife Service (USFWS) regarding potential impacts to such species or their habitat that may occur on the Project site. The USFWS will issue a biological opinion that will contain terms and conditions for the proposed Project that are needed to avoid jeopardizing the survival and recovery of any listed species or causing adverse modification to designated critical habitat. (16 U.S.C. § 1536.) These measures would be included in whatever project alternative is chosen as the LEDPA.

Excluding the spineflower conservation measures from the overall project purpose does not mean that the draft 404(b)(1) alternatives analysis will fail to account for impacts to spineflower. Although the spineflower is an upland species, is not part of the aquatic ecosystem, and is not normally found within areas subject to Corps jurisdiction, the CWA section 404(b)(1) Guidelines provide a process to consider impacts to sensitive species that are not part of the aquatic environment. The CWA section 404(b)(1) Guidelines require the Corps to consider "other significant environmental consequences" as part of the process of identifying the LEDPA. Consideration of these non-aquatic environmental impacts allows the Corps to balance the goal of preserving aquatic resources against the possible effects that pursuing that goal may have on non-aquatic resources.

Second, the Corps' defined overall project purpose for the 404(b)(1) alternatives analysis omits the goal of "implementing" the Newhall Ranch Specific Plan, which is used in **Subsection 1.6** of the EIS/EIR. Because this language could be construed very narrowly, to require compliance with the exact terms and specifications of the Specific Plan, the Corps' defined overall project purpose instead includes the requirement of "achiev[ing] the basic objectives of the Specific Plan." When combined with information about the major categories of project development (*e.g.*, residential, commercial and public uses) and the size and location of the proposed Project, this language strikes the proper balance between specificity and flexibility that is needed for the 404(b)(1) alternatives analysis. It is broad enough to allow consideration of practicable alternatives that reduce environmental impacts while achieving the basic goals embodied in the Specific Plan, even if these alternatives deviate from the precise parameters contained in the Specific Plan.

The Newhall Ranch Specific Plan was prepared pursuant to the provisions of California Government Code, which allows preparation, review, and adoption of Specific Plans as may be required for the systematic execution of a General Plan. The Code authorizes jurisdictions to adopt specific plans as policy documents by resolution, or as regulatory documents by ordinance. (Gov. Code §§ 65450-65457.) In addition, the Los Angeles County Planning and Zoning Code provides procedures for the processing of

Specific Plans in Los Angeles County. (Los Angeles County Planning and Zoning Code, Title 22, Chapter 22.46.) Pursuant to those procedures, the Los Angeles County Regional Planning Commission recommended certification of the Newhall Ranch Specific Plan Program EIR and approval of the Specific Plan, and the Los Angeles County Board of Supervisors certified the Program EIR and adopted the Specific Plan on May 27, 2003.

The Specific Plan implements the goals and policies of the Los Angeles County General Plan and Santa Clarita Valley Area Plan within the Specific Plan Area. The basic land use planning objectives of the Specific Plan are to:

1. Create a major new community with interrelated Villages that allows for residential, commercial and industrial development, while preserving significant natural resources, important landforms and open areas.
2. Avoid leapfrog development and accommodate projected regional growth in a location which is adjacent to existing and planned infrastructure, urban services, transportation corridors, and major employment centers.
3. Cluster development within the site to preserve regionally significant natural resource areas, sensitive habitat, and major landforms.
4. Provide development and transitional land use patterns which do not conflict with surrounding communities and land uses.
5. Arrange land uses to reduce vehicle miles traveled and energy consumption.
6. Provide a complementary and supportive array of land uses which will enable development of a community with homes, shopping, employment, schools, recreation, cultural and worship facilities, public services, and open areas.
7. Organize development into Villages to create a unique identity and sense of community for each.
8. Design Villages in which a variety of higher intensity residential and nonresidential land uses are located in proximity to each other and to major road corridors and transit stops.
9. Establish land uses and development regulations which permit a wide range of housing densities, types, styles, prices, and tenancy (for sale and rental).
10. Designate sites for needed public facilities such as schools, fire stations, libraries, water reclamation plant and parks.
11. Allow for the development of community services and amenities by the public and private sectors, such as medical facilities, child care, colleges, worship facilities, cultural facilities, and commercial recreation.
12. Create a physically safe environment by avoiding building on fault lines and avoiding or correcting other geologically unstable landforms; by constructing flood control infrastructure to protect urban areas; and by implementing a fuel modification program to protect against wildfire.

The Specific Plan also includes the following Economic Objectives:

1. Adopt development regulations which provide flexibility to respond to and adjust to changing economic and market conditions over the life of Newhall Ranch.

2. Provide a tax base to support public services.

3. Adopt development regulations and guidelines which allow site, parking, and facility sharing and other innovations which reduce the costs of providing public services.

In addition to the basic objectives listed above, the approved Specific Plan also included objectives related to Mobility (five objectives); Parks, Recreation and Open Space (six objectives); and Resource Conservation (nine objectives), which are not considered to be "basic" objectives of the Specific Plan and are not included in the Corps' defined overall Project purpose. These objectives complement the basic economic and land-use objectives, and are listed in full in Section 2.1 of the Specific Plan.

Given the extent of the exercise of local government authority, it is reasonable for the Corps to take the years of planning and study that produced the Specific Plan into account in defining the Corps' overall project purpose. *Friends of the Earth v. Hintz*, 800 F.2d at p. 833; *Louisiana Wildlife Federation v. York*, 761 F.2d at p. 1048. Specifically, because the basic objectives of the Specific Plan represents many years of the County's planning efforts and identifies the essential elements that are necessary to meet the County's objectives for the proposed Project, it is appropriate to include the basic objectives of the Specific Plan as an element of the overall project purpose under the CWA section 404(b)(1) Guidelines.

Taking the Specific Plan into account is consistent with the Corps' regulations, which state that state and local governments have primary responsibility for land use decisions and that the Corps normally accepts those decisions. (33 C.F.R. § 320.4(j)(2).) Case law also shows that it is proper for the Corps, in defining the overall project purpose, to take into account the objectives of local land use and planning authorities.

Third, the overall project purpose for the 404(b)(1) alternatives analysis omits the goal of "implement[ing] the RMDP component of the proposed Project," as described in the EIS/EIR at **Subsection 1.6**. The intent of the RMDP is to facilitate implementation of development under the Specific Plan. This goal can be achieved without including the exact details of the RMDP in the overall project purpose, because an alternative that does not provide adequate infrastructure to achieve the basic objectives of the Specific Plan would not be considered practicable and therefore could not be the LEDPA. Omitting the RMDP from the overall project purpose allows the consideration of alternatives that achieve the basic objectives of the Specific Plan, even if they rely on infrastructure that differs somewhat from that described in the RMDP.

Achieving the basic objectives of the Specific Plan necessarily requires development-related infrastructure, including roads, bridges and road crossing culverts, bank stabilization/protection, drainage facilities, water quality control facilities, and trails. The infrastructure is described in the RMDP, which is intended to facilitate the implementation of the Specific Plan. In addition, the RMDP describes the conservation and mitigation measures that are intended to ensure that the proposed Project complies with state and federal environmental protection requirements. (Draft EIS/EIR, p. 2.0-8.) In recognition of this relationship between the Specific Plan and the RMDP, the Draft EIS/EIR states that the NEPA project purpose is "to implement the Specific Plan . . . and, at the same time, implement the RMDP component of the proposed Project." (EIS/EIR, **Subsection 1.6**, Project Purpose and Need/Project Objectives.)

It is unnecessary to include the RMDP as an element of the overall project purpose for the 404(b)(1) alternatives analysis. To the extent that the infrastructure described in the RMDP is necessary to achieve the basic objectives of the Specific Plan, the need for that infrastructure is adequately captured by including the basic Specific Plan objectives in the Corps' defined overall project purpose. An alternative that does not allow for development of sufficient infrastructure to facilitate development consistent with

the basic objectives of the Specific Plan may not be considered practicable. On the other hand, an alternative that achieves the basic objectives of the Specific Plan should be explored, and may be considered practicable under the CWA section 404(b)(1) Guidelines (depending on consistency with other criteria), even if it relies on infrastructure/facilities that differ somewhat from those described in the RMDP. Including consistency with the RMDP as an element of the overall project purpose for the 404(b)(1) alternatives analysis could unnecessarily curtail analysis of such alternatives.

For the same reasons, requiring compliance with the precise conservation and mitigation measures described in the RMDP would define the overall project purpose too narrowly for the 404(b)(1) alternatives analysis. First, to the extent that the RMDP addresses aquatic resources, the Corps must exercise its independent judgment regarding the extent of avoidance and mitigation of impacts that is necessary to comply with the CWA section 404(b)(1) Guidelines. Second, to the extent that the RMDP conservation and mitigation measures pertain to non-aquatic resources, strict adherence to the RMDP could unnecessarily constrain consideration of alternatives that otherwise have the potential to achieve the basic objectives of the Specific Plan. Therefore, consistency with the RMDP will not be included as an element of the overall project purpose in the draft 404(b)(1) alternatives analysis for the proposed Project. The conservation goals of the RMDP will be considered under the rubric of "other significant environmental consequences," similar to the treatment of the proposed spineflower preserve discussed above.

In consideration of the applicant's stated project purpose, the Corps has defined an overall project purpose statement, that, as described above, ensures that the alternatives analysis is not unnecessarily constrained by elements that are not essential to the proposed Project. The changes will allow consideration of all practicable alternatives that have the potential to reduce impacts to the aquatic environment, consistent with the CWA section 404(b)(1) Guidelines.

Response 10

The comment states that USEPA will provide comments on the overall project purpose even though USEPA has not reviewed the draft 404(b)(1) alternatives analysis based on an assumption that the overall project purpose will be the same as that stated in the Draft EIS/EIR. Although the Corps' defined overall project purpose included in the draft 404(b)(1) alternatives analysis is generally consistent with that used in the Draft EIS/EIR, it has been revised, consistent with the CWA section 404(b)(1) Guidelines. For more information, please see **Response 9**, above.

Response 11

The comment cites the Guidelines, stating that for non-water dependent projects proposing to fill wetlands, the applicant must rebut the presumption that less damaging alternatives that do not involve filling special aquatic sites are available. The Corps acknowledges that there is a presumption for non-water dependent projects, that practicable alternatives exist that do not involve discharges to special aquatic sites and that those alternatives have less adverse impact on the aquatic ecosystem. The 404(b)(1) alternatives analysis provides information concerning this presumption.

Response 12

The comment states that the Corps must take the applicant's purpose into consideration, and may also consider local plans such as the County-approved Specific Plan, but that the Corps must ensure that the

Corps' defined overall project purpose is not so narrowly defined as to constrain the draft 404(b)(1) alternatives analysis. The Corps has considered both the CWA section 404(b)(1) Guidelines, available guidance, and case law in defining an overall project purpose that takes into account the basic objectives of the Specific Plan approved by the County while ensuring that the overall project purpose does not unduly constrain the analysis of alternatives. For further details regarding this process, please see **Response 9**, above.

Response 13

The comment states that the applicant's overall project purpose is best described as "the development of a master-planned community," that this purpose is not water-dependant, and that the Project area contains special aquatic sites. The Corps concurs that the Project area contains special aquatic sites, specifically 268 acres of jurisdictional wetlands within the Santa Clara River mainstem and in the Salt Creek and Potrero Canyon tributaries. The Corps does not agree that "development of a master-planned community" fully describes the overall project purpose, although it may be a suitable statement of the basic project purpose. The Corps has defined the basic project purpose to be shelter (a non-water dependent purpose), and has defined the overall project purpose to be "the development of a master planned community with interrelated Villages in the vicinity of the Santa Clarita Valley in northwestern Los Angeles County that achieves the Basic Objectives of the Specific Plan by providing a broad range of land uses of approximately the same size and proportions as approved in the Specific Plan, including residential, mixed-use, commercial and industrial uses, public services (schools, parks, *etc.*), a water reclamation plant, and large tracts of open space. The Basic Objectives of the Specific Plan, which are set forth in the Specific Plan, adopted May 27, 2003." These definitions are used in the Corps' draft 404(b)(1) alternatives analysis for the proposed Project, presented in **Appendix F1.0** of the Final EIS/EIR.

Response 14

The comment states the Corps should steer the applicant towards alternatives that do not impact special aquatic sites, and that of the alternatives evaluated in the Draft EIS/EIR. As discussed in **Response 2**, above, the Draft EIS/EIR described various levels of avoidance of special aquatic sites. The 404(b)(1) alternatives analysis analyzes the practicability of alternatives that avoid the special aquatic sites located within the Specific Plan area.

Response 15

The comment states USEPA's concern that the overall project purpose stated in the Draft EIS/EIR is overly narrow, and suggests the use of a broader statement of purpose such as "construction of a high-density housing and commercial project." The Corps' defined overall project purpose utilized in the 404(b)(1) alternatives analysis does not refer to implementation of the RMDP. Instead, the overall project purpose refers to attaining the basic objectives of the Specific Plan, consistent with the suggestion by USEPA that the project purpose should "encompass these broader plans as set forth in the Specific Plan." The Corps believes that this overall project purpose allows sufficient flexibility in the proposed Project design to accommodate any practicable alternative that is found to attain the basic objectives of the Specific Plan while reducing adverse impacts to the aquatic ecosystem. However, the Corps does not believe that an overall project purpose as broad as that suggested by USEPA -- *i.e.*, "construction of a large scale, high density housing and commercial project" -- would allow for meaningful analysis of the practicability of alternatives. The overall project purpose is properly related to the many years of effort by Los Angeles

County to develop the Specific Plan, within northwestern Los Angeles County, without providing reference to specific numbers of houses or acreages of development that would inappropriately limit the alternatives analysis. For more information about the overall project purpose, please see **Response 9**, above.

Response 16

The comment states that the basic premise of the section 404 permitting program is that no discharge of fill material into waters of the United States shall be permitted if a less damaging, practicable alternative exists, or if the proposed discharge would cause significant degradation of the nation's waters. This comment contains statements of legal principles, and requires no response.

Response 17

The comment states that for a project to be permitted, it must be demonstrated that practicable steps towards impact avoidance, minimization, and compensation ("mitigation sequencing" requirement) have occurred. This comment contains statements of legal principles, and requires no response. As described in **Response 2**, the Draft EIS/EIR contained a range of alternatives that demonstrated avoidance and minimization of impacts.

Response 18

The comment states that avoidance is the first step in determining whether a proposed project constitutes the LEDPA, and cites the CWA section 404(b)(1) Guidelines' requirement that a discharge shall not be permitted if a less environmentally damaging practicable alternative exists. This comment contains statements of legal principles, and requires no response. As described in **Response 2**, the Draft EIS/EIR contained a range of alternatives that demonstrated avoidance and minimization of impacts.

Response 19

The comment states that seven alternatives were evaluated in the Draft EIS/EIR, that the applicant's proposed Project had the greatest level of impact among the alternatives evaluated, and that the applicant's proposed Project did not appear to follow the mitigation sequencing requirement. As required by CEQA and NEPA, the Draft EIS/EIR evaluated the environmental impacts of the proposed Project, as well as the effects of reasonable alternatives that would avoid or substantially lessen those impacts. Alternative 2 was the applicant's proposed Project, and was not characterized in the Draft EIS/EIR as the Corps' preferred NEPA alternative or the LEDPA. Under NEPA, the federal lead agency may, but is not required to, identify a preferred alternative in a draft EIS, however they must identify a preferred alternative in the Final EIS (40 C.F.R. § 1502.14(e)). In this case, the Corps did not identify a preferred alternative in the Draft EIS/EIR. The Corps' preferred alternative (*i.e.*, the Draft LEDPA) is identified in **Subsection 5.13** of the Final EIS/EIR. Because the purpose for the alternatives analysis under CEQA and NEPA is identifying ways to reduce the environmental impacts of a proposal, it is logical that the applicant's proposal would have the highest level of impact; alternatives having impacts greater than those of the proposed Project are contrary to this purpose and evaluation of such alternatives is not required.

Response 20

As the comment states further avoidance of waters is necessary before formulation of the LEDPA. Please refer to the Corps' 404(b)(1) alternatives analysis for a preliminary evaluation of compliance with the CWA section 404(b)(1) Guidelines, including avoidance, minimization, and compensation.

Response 21

The comment points out slight differences in the scope of alternatives analysis required by NEPA and by the CWA section 404(b)(1) Guidelines, and states that it is unclear whether Alternatives 3 through 7 in the Draft EIS/EIR meet the definition of "practicable" alternatives under section 404. The Corps' draft 404(b)(1) alternatives analysis specifically discusses the required practicability factors and reaches a preliminary conclusion regarding the practicability of each alternative as well as providing additional information regarding the practicability of avoiding and minimizing impacts to specific resource types and tributaries.

Response 22

The comment states USEPA's understanding that the 404(b)(1) alternatives analysis for the proposed Project has not yet been prepared, and requests that USEPA be given the opportunity to review and comment on the analysis when it becomes available. The USEPA is correct in its understanding that the 404(b)(1) alternatives analysis was not completed at the time the PN and Draft EIS/EIR were released for public review and comment. However, a 404(b)(1) alternatives analysis has been subsequently completed, by the Corps, and is included in **Appendix F1.0** of the Final EIS/EIR.

Response 23

The comment states that in order for the Corps permitting process to proceed, the preferred alternative identified in the Draft EIS/EIR should also be considered the LEDPA. The Corps understands and concurs with this point. The Draft LEDPA, as determined by the Corps' draft 404(b)(1) alternatives analysis (found in **Appendix F1.0** of the Final EIS/EIR), is constructed from elements of the seven alternatives evaluated in the Draft EIS/EIR, and a stand-alone analysis of this alternative has been included in the Final EIS/EIR. The Draft LEDPA is identified as the Corps' preferred alternative in revised **Section 5.0** of the Final EIS/EIR, thereby making the EIS/EIR and the 404(b)(1) alternatives analysis consistent in this regard. The commentor is incorrect that the LEDPA is the "alternative with the least impacts to the aquatic ecosystem." As stated at 40 C.F.R. Part 230.10(a), "except as provided under 404(b)(2), no discharge shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences." The commentor's proposed definition of the LEDPA omits the "practicability" concept required by federal law and is inconsistent with the regulations at 40 C.F.R. Part 230.

Response 24

See **Response 4**, above.

Response 25

The comment asserts that impacts to the river may be unacceptable due to the net loss of 157 acres within the 100-year river floodplain and 4.43 acres of waters of the United States within the River itself, and that the significance criteria in the Draft EIS/EIR for flooding evaluated only flood hazards, and not impacts to floodplains themselves. As noted in Executive Order (EO) 11988, one of the primary goals of studying impacts to floodplains is to "minimize the impact of floods on human safety, health and welfare." (EO 11988, Section 1.) Thus, the Draft EIS/EIR's focus on flood hazards is appropriate for carrying out the intent of the floodplain EO. Furthermore, the amount of area covered by the 100-year floodplain discussed by the commentor is distinct from, and serves a different purpose than, the limits of waters of the United States, which extend only to the ordinary high water mark in the absence of adjacent wetlands and are the Corps' primary regulatory concern. The analysis of the floodplain was further analyzed in the Draft EIS/EIR under **Sections 4.2**, Geomorphology and Riparian Resources, **4.4**, Water Quality, and **4.5**, Biological Resources. Please also see revised **Sections 4.2**, **4.4**, and **4.5** of the Final EIS/EIR.

For clarification, under the proposed Project, there would be a net loss of approximately 124 acres of the Santa Clara River 100-year floodplain. Geographic Information System (GIS) supported hydraulic modeling (Hydrologic Engineering Centers River Analysis System (HEC-RAS) model, and thus more up-to-date than the FEMA mapped floodplain) conducted to support the Draft EIS/EIR (**Figure 4.5-61**) identifies 1,408 acres of 100-year floodplain in the existing condition, of which 293 acres are considered "disturbed" in the form of cultivated agricultural fields, farm roads and other agricultural facilities. The net reduction in 100-year floodplain acreage is comprised of 133.5 acres of disturbed land. Therefore, the net reduction of 100-year Santa Clara River floodplain is predominantly comprised of disturbed agricultural land, rather than natural riparian habitat within and adjacent to the River.

Response 26

The comment discusses the requirements of Federal EOs pertaining to floodplains, including EO 11988 (Floodplain Management) and a draft revised EO requiring federal agencies to avoid placing fill material in floodplains to the maximum extent practicable. The comment further states that the proposed Project is inconsistent with the intent of these EOs due to the placement of fill material within 157 acres of the river's 100-year floodplain. The draft EO is not legally binding on the federal agencies at this time. Nonetheless, consistent with EO 11988 and the draft EO, **Section 4.1**, Surface Water Hydrology and Flood Control, of the Draft EIS/EIR discussed floodplain impacts in detail, and the 404(b)(1) alternatives analysis discussed the practicability of a floodplain avoidance alternative. See also, **Response 25**, above, and revised **Section 4.1** of the Final EIS/EIR.

Response 27

The comment states that the proposed Project poses significant and possibly unacceptable effects on the Santa Clara River due to the proposed impacts within the on-site tributaries, and lists several stream functions performed by ephemeral and intermittent drainages, including hydrologic connectivity, energy dissipation, sediment transport, groundwater recharge, biogeochemical processes, seed storage, and providing stopover habitat for wildlife. The Draft EIS/EIR, **Section 6.0**, Cumulative Impacts, included a full discussion of the proposed Project's potential direct, indirect, secondary, and cumulative impacts related to **Section 4.1**, Surface Water Hydrology and Flood Control, **Section 4.2**, Geomorphology and Riparian Resources, **Section 4.4**, Water Quality, **Section 4.5**, Biological Resources and **Section 4.6**,

Jurisdictional Waters and Streams; but concluded that those impacts would be mitigated to a less-than-significant level after implementation of Specific Plan mitigation and the mitigation recommended in the Draft EIS/EIR. To address the USEPA's concerns on effects to ephemeral tributaries, the Draft LEDPA includes additional avoidance and minimization of impacts to tributaries in the Project area. For additional information, please see additional analysis in **Appendix F1.0** of the Final EIS/EIR.

Response 28

The comment identifies some of the effects that urbanization can have on ephemeral tributaries, and states that USEPA would, therefore, expect the amount and scope of fill proposed to significantly impact the affected tributaries, as well as the river mainstem. The Specific Plan site is large and contains several tributaries to the Santa Clara River. As discussed in the 404(b)(1) alternatives analysis, a certain amount of site grading is necessary to obtain a sufficient buildable area to accomplish the basic objectives set forth in the Specific Plan, as further defined by the Corps' overall project purpose. As discussed in further detail in **Response 29**, any project impacts related to river and/or tributary modification were determined to be mitigated to a less-than-significant level with the mitigation included in the Specific Plan and additional measures (revised Mitigation Measure BIO-2 through Mitigation Measure BIO-16, and Mitigation Measures SW-1 through SW-7, recommended in the Draft EIS/EIR, **Section 4.5**, Biological Resources, and **Section 4.6**, Jurisdictional Waters and Streams, respectively).

Response 29

The comment identifies some of the services provided to higher-order waters by intact, lower-order streams, and states that the loss of such streams results in increased need for flood control facilities and for drinking water and wastewater infrastructure.

This comment pertains to potential proposed Project impacts to tributaries and their related impacts to the Santa Clara River. Potential impacts to the geomorphic function of both the tributaries and the Santa Clara River were evaluated using the results of the HARC discussed in the Draft EIS/EIR, **Section 4.6**, Jurisdictional Waters and Streams. For the tributaries, the impact analysis provided in the Draft EIS/EIR, **Section 4.2**, Geomorphology and Riparian Resources, uses the combined HARC Area Weighted (AW) score for all of the tributaries rather than the individual HARC AW scores for each tributary in order to evaluate the overall impacts of the proposed Project and alternatives on geomorphic function. In some cases, a reduction in geomorphic function may occur in one tributary but is offset by an increase in geomorphic function in another tributary. Accordingly, for the tributaries, the overall net HARC AW score for all of the tributaries is used to determine impacts for the proposed Project and each alternative. In regards to the Santa Clara River, the analysis uses the HARC AW scores for the specified parameters as well as the pre- and post-Project hydraulic and sediment transport modeling results, which are used as an additional indicator of impacts within the River Corridor.

As discussed in the Draft EIS/EIR, **Section 4.2**, Geomorphology and Riparian Resources, the HARC analysis indicates that, overall, the proposed Project would result in substantial changes to the geomorphic function of the tributaries with net losses observed for the source water and hydroperiod and net gains observed for the floodplain connection, surface water persistence, and flood prone area metrics. In total, the proposed Project would result in a net loss of 17.28 hydrology AW-score units, and overall the Total HARC AW-score has a net loss of 7.17 units within the tributaries. Absent mitigation, the loss in HARC AW-score units would be a significant impact.

Mitigation Measures SW-1 through SW-3 proposed in the Draft EIS/EIR, **Section 4.6**, Jurisdictional Waters and Streams, increase post-Project AW-score units through enhancement of areas within Salt Creek. Accordingly, the post-Project AW-score units will be required to exceed the existing conditions and thereby result in a net lift to geomorphic function. These mitigation measures also specify that the success criteria for mitigation sites should take into consideration the functions targeted for "lift" through mitigation. The functional lift obtained through avoidance and restoration must be greater than the loss of total HARC AW-score units. In addition, the impacts to geomorphology to the tributary drainages would be further reduced through the implementation of Project-specific Mitigation Measure GRR-4. This measure requires that instream channel design features be incorporated to control potential hydromodification impacts to geomorphology and riparian resources. Accordingly, the net loss in HARC hydrology AW-score units, presented in **Table 4.2-15** of the Draft EIS/EIR, would be offset by the required net gain in the Total AW-score units within the tributaries as specified in Mitigation Measure SW-3 and as a result of implementation of Mitigation Measures SW-1 and SW-2. The basis of design for the tributary streams described in the impact analysis considered current site conditions, and set as a performance standard that the restored channels must convey sediment under future conditions in a "dynamically stable condition" (neither long-term erosion nor deposition) and that they support the proposed native revegetation program. Accordingly, the impacts of the RMDP to the geomorphic function of the tributaries with the implementation of Mitigation Measures SW-1 through SW-3 and GRR-4 are considered less than significant.

Within the mainstem of the Santa Clara River, the HARC hydrology analysis, included in the Draft EIS/EIR, **Appendix 4.6**, indicates that the proposed Project would result in only minor changes to the geomorphic function of the Santa Clara River with small decreases in the source water and floodplain connection metrics. In total, the proposed Project would result in a net loss of 2.70 hydrology AW-score units but would increase the total HARC AW-score units by 42.85. The overall increase in HARC AW-score units is primarily attributed to the benefits provided by the proposed Project to riparian habitat as discussed in **Section 4.6**, Jurisdictional Waters and Streams, of the Draft EIS/EIR. In general, the HARC analysis supports the conclusion that the relatively minor impacts to the hydrologic processes of the Santa Clara River do not have an overall negative effect on the geomorphic function of the River (*e.g.*, ability to support riparian habitat).

In addition to the HARC analysis, potential impacts to the Santa Clara River were also evaluated in **Sections 4.1** and **4.2** of the Draft EIS/EIR. Specifically, the analysis of **Section 4.1** of the Draft EIS/EIR used HEC-RAS model results to determine the floodplain area and hydraulic parameters for existing conditions and conditions following Project implementation. Regarding flows, the model was used to evaluate existing and post-Project conditions in the Santa Clara River for the 2-, 5-, 10-, 20-, 50-, and 100-year flow events. A comprehensive summary of the model results is provided in PACE Floodplain Hydraulics Impacts Assessment for the Santa Clara River (PACE, 2008). The model results indicate that there would be minimal if any change in maximum depth, average velocity, friction slope, top width, area and total shear from existing conditions at a location approximately four miles downstream of the Project boundary (or four miles downstream of the Los Angeles County/Ventura County line). In addition, the Draft EIS/EIR incorporates by reference the previously certified Newhall Ranch environmental documentation. The HEC-RAS analysis included in Section 2.3 of the Newhall Ranch Revised Additional Analysis (ISI, 2003) also considers flows to a point approximately four miles downstream of the Project site (four miles downstream of the Los Angeles County/Ventura County line). The data from the PACE,

2008 analysis and from Section 2.3 of the Newhall Ranch Additional Analysis for the referenced downstream reach are presented in the tables below:

Average Hydraulic Parameters in Santa Clara River for the Reach downstream of the Project Site (Located at a Point Approximately 4-Miles Downstream of Project Site, Within Ventura County [HEC-RAS River Station-to-Station 3080-1000]) (PACE, 2008)

Alt. No.	Max Depth (ft)	Avg. Velocity (fps)	Friction Slope (ft/ft)	Area (sq.ft)	Top Width (ft)	Total Shear (psf)
2-Year Storm Event						
Existing	3.1	4.4	0.0050	652.2	360.9	0.77
Alt. 2	3.1	4.4	0.0050	652.3	361.0	0.77
Delta	0	0	0	0.1	0.1	0
5-year Storm Event						
Existing	5.6	5.7	0.0049	1691.7	504.0	1.44
Alt. 2	5.6	5.7	0.0049	1692.0	504.8	1.44
Delta	0	0	0	0.3	0.8	0
10-Year Storm Event						
Existing	7.4	5.7	0.0049	2974.1	666.5	1.89
Alt. 2	7.4	5.7	0.0049	3009.8	666.4	1.92
Delta	0	0	0	35.7	-0.1	0.3
20-Year Storm Event						
Existing	9.2	6.3	0.0048	4407.3	800.4	1.99
Alt. 2	9.2	6.3	0.0048	4407.3	800.4	1.99
Delta	0	0	0	0	0	0
50-Year Storm Event						
Existing	11.6	7.0	0.0047	6658.2	968.5	2.32
Alt. 2	11.7	6.9	0.0048	6774.3	970.5	2.39
Delta	0.1	-0.1	0.0001	116.1	2.0	0.07
100-Year Storm Event						
Existing	13.5	7.7	0.0046	8495.0	1053.7	2.66
Alt. 2	13.6	7.6	0.0047	8722.3	1056.0	2.85
Delta	0.1	-0.1	0.0001	227.3	2.3	0.19

Hydraulic Parameters (With Dissipation Downstream of County Line) in Santa Clara River for the Cross-Section Located Approximately 4-Miles Downstream of Project Site, Within Ventura County [HEC-RAS River Station 1000]) (Sikand, July 14, 2000)										
Discharge Frequency	**Existing Q Total (cfs)**	**Proposed Q Total (cfs)**	**Change in Q (cfs)**	**Existing Velocity (ft/s)**	**Proposed Velocity (ft/s)**	**Velocity Increase (ft)**	**Existing Depth (ft)**	**Proposed Depth (ft)**	**Depth Increase (ft)**	**Slope (ft/ft)**
2-Year	2700	2700	0	4.59	4.59	0	1.51	1.51	0	0.004
5-Year	8800	8800	0	6.84	6.84	0	3.04	3.04	0	
10-Year	15975	15975	0	8.41	8.41	0	4.33	4.33	0	
20-Year	25815	25815	0	9.94	9.94	0	5.74	5.74	0	
50-Year	43950	43950	0	11.47	11.47	0	8.05	8.05	0	
100-Year	62190	62190	0	13	13	0	9.66	9.66	0	
Capital Q	174200	174400	200	21.79	21.79	0	14.26	14.27	0.01	

Regarding downstream sediment transport, the analysis of **Section 4.2** of the Draft EIS/EIR concluded that there would be no significant changes in local patterns of sediment deposition and erosion. To minimize erosion, erosion resistant materials such as concrete, soil cement or secured rip-rap would be used according to the standards, criteria, and specifications developed by the Los Angeles County Department of Public Works (DPW) to ensure long-term stability (Mitigation Measure GRR-3). The specific improvements for each drainage area would be designed as part of the final drainage plans prepared to DPW standards during the subdivision process. (Mitigation Measures SP-4.2-5 [DPW plan and map approvals] and SP-4.2-6 [DPW-approved permanent erosion control measures].) Incorporation and implementation of proper design, regulatory compliance, facility maintenance, and specified mitigation measures will reduce the impact of erosion and/or downstream deposition to a less-than-significant level.

The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project.

References:

The following references were used or relied upon, are available for public review upon request to the Corps or CDFG, and are incorporated by reference:

Impact Sciences, Inc. 2003. Revised Additional Analysis to the Newhall Ranch Specific Plan and Water Reclamation Plan Final Environmental Impact Report. Project #94087. SCH #95011015. Prepared for the Los Angeles County Department of Regional Planning. May 2003.

Pacific Advanced Civil Engineering, Inc., 2008. Newhall Ranch River Fluvial Study Phase 2. January 2008.

Sikand Engineering Associates. 2000. Supplemental Report for Newhall Ranch Santa Clara River HEC-RAS Calculations. July 14, 2000.

Response 30

The comment underscores the ecological, economic, and public health-related values of ephemeral streambeds, and states that in many watersheds, impacts to ephemeral streams have been either unmitigated or mitigated out-of-kind. The Draft EIS/EIR Mitigation Measures ensure that at least 1:1 in-kind mitigation will occur for tributary and river impacts, and on-site mitigation remains the preferred approach (see revised Mitigation Measures BIO-2, SW-6 and SW-7). The commentor does not address the substance of the Draft EIS/EIR, and no further response is provided.

Response 31

The comment summarizes **Comments 24 through 30**, and asserts that the proposed Project poses unacceptable impacts to the river through removal of much of the floodplain, and through elimination/degradation of functions in the river mainstem caused by proposed fill in the tributaries. This comment addresses the contents of the PN, which were addressed in **Responses 24 through 30**. However, it appears these statements were made prior to consideration of the Final EIS/EIR and the 404(b)(1) alternatives analysis.

Response 32

The comment asserts that the proposed Project's impacts on the river are substantial, unacceptable, and contrary to the goals of the CWA. This comment addresses the contents of the PN, which were addressed in **Responses 24 through 30**. However, it appears these statements were made prior to consideration of the Final EIS/EIR and the 404(b)(1) alternatives analysis.

Response 33

The comment states that USEPA is particularly concerned about impacts within the Potrero Canyon tributary, and restates information contained in the Draft EIS/EIR related to the acreages of waters of the United States, both existing and impacted by the proposed Project, within Potrero Canyon. This comment is an introduction to comments that follow. No further response is provided.

Response 34

The comment notes the presence of a cismontane alkali marsh within Potrero Canyon; and points out the rebuttable presumption in CWA-related regulations that, where a discharge is proposed into a special aquatic site, all practicable alternatives that do not involve discharges into special aquatic sites are presumed to have lesser impacts on the aquatic ecosystem. As stated above, the Corps agrees with the portion of the comment that discusses the "rebuttable presumption" related to special aquatic sites. The Corps acknowledges that portions of Potrero Canyon do contain special aquatic sites. Avoidance and minimization of impacts to wetlands in Potrero Canyon have been considered by the Corps in the draft 404(b)(1) alternatives analysis, presented in **Appendix F1.0** of this Final EIS/EIR.

Response 35

The comment restates information contained in the Draft EIS/EIR related to the acreages of proposed fill within wetlands and non-wetland waters of the United States within Potrero Canyon. The comment does not address the content or adequacy of the PN or the Draft EIS/EIR; therefore, no further response is provided. The commentor is correct that under Alternative 2, the lower Potrero wetlands could become isolated. Alternatives 3-7 discussed in the Draft EIS/EIR would not result in isolation of the lower Potrero wetlands. The Corps' draft 404(b)(1) alternatives analysis presented in **Appendix F1.0** of the Final EIS/EIR includes a Draft LEDPA that would avoid isolating these wetlands.

Response 36

The comment restates information contained in the Draft EIS/EIR related to the high functional quality of the Potrero Canyon tributary, the acreage of mitigation required under the ratios presented in the Draft EIS/EIR, and the extent to which impacts in Potrero Canyon would be mitigated at an off-site location. Under the Draft LEDPA identified in the draft 404(b)(1) alternatives analysis (Final EIS/EIR **Appendix F1.0**), mitigation for riparian impacts within Potrero Canyon would be implemented entirely on site; that is, within Potrero Canyon and not at an off-site location. Under the Draft LEDPA identified in the draft 404(b)(1) alternatives analysis (Final EIS/EIR **Appendix F1.0**), mitigation for riparian impacts within Potrero Canyon would be implemented entirely on site; that is, within Potrero Canyon and not at an off-site location. The comment does not address the content or adequacy of the PN or the Draft EIS/EIR; no response is provided.

Response 37

The commentor states that it believes further avoidance of cismontane alkali wetland and ephemeral tributary is necessary in Potrero Canyon because it will be difficult if not impossible to replace and mitigate these resources.

The Corps' draft 404(b)(1) alternatives analysis concluded that avoidance of cismontane alkali wetlands in Potrero Canyon was not practicable. However, under the Draft LEDPA, cismontane alkali marsh (CAM) vegetation is planned to be restored downstream of the Potrero Canyon project fill area on a 19-acre agricultural field and pastureland that may necessitate some micro-topographical grading. It is likely, due to numerous site conditions observed, that this field will be easily converted into a CAM habitat area. Prior to intensive agricultural activities, this field likely supported CAM. This conclusion is based on the following observed site characteristics:

- Site soils present similar textural and chemical characteristics as found in areas currently supporting CAM vegetation. These factors include fine-textured silty soils and hypersalinity. Hypersalinity at the CAM mitigation site is a key component of CAM ecology that excludes other freshwater and brackish marsh species from establishing within CAM-occupied sites.

- Subsurface hydrology appears to be similar to areas supporting CAM vegetation. Groundwater depth and movement is similar to CAM-occupied sites within Potrero Canyon. In existing CAM areas, groundwater depth was measured from December 2006 through December 2007, to a maximum of 7.13 feet below land surface during this period. Within the proposed CAM mitigation site, groundwater was measured at depth maximum of 7.9 feet below land surface.

- CAM is present immediately downstream of the proposed CAM mitigation site in a shallow drainage swale that is hydraulically connected to the proposed CAM mitigation site. This proximity suggests a shared hydrology and soils that will support CAM vegetation.

- The proposed CAM mitigation site will retain a significant watershed area that provides overland sheet flow across the site during winter rain events. The low intensity-low volume prolonged-duration sheet flow is characteristic of CAM sites throughout the valley. It is not known what contribution this surface hydrology makes to sustain CAM vegetation, but the similar characteristic of the mitigation site will mimic existing CAM-occupied sites. Sheet flow is expected to provide winter soil saturation at the ground surface and slowly dry through spring months. This dry down period likely protects CAM sites from leaching salinity from the soil while providing needed soil saturation that maintains CAM vegetation.

Beyond the similar site characteristics shared between the existing and proposed CAM sites, the mitigation approach to be implemented is designed to support successful establishment of self-sustaining CAM vegetation and ecological functions and services. The following features of the mitigation approach are designed to support mitigation success:

- The existing unpaved road and culvert drainage structure that is present at the downstream edge of the mitigation site will be topographically modified to augment down-canyon sheet flow from the mitigation site to the existing CAM vegetation. Similarly, the unpaved road south of the proposed mitigation site will be modified to augment surface hydrology connects to the upland watershed

south of the mitigation area. These land alterations are intended to create appropriate winter sheet flow, soil saturation, and local groundwater replenishment during winter months. The restored hydraulic system will promote the desired annual soil wetting/dry-down cycle that sustains hypersaline soils that support CAM vegetation in Potrero Canyon.

- CAM soil salvage will be implemented where topographic modifications are required to re-establish surface hydrology and hydraulic connects between upland watershed areas and adjacent CAM vegetation areas downstream of the mitigation site. This technique will be used to restore localized surface hydrology of the Potrero Valley bottom land that supports CAM vegetation.

- CAM vegetation will be salvaged as blocks and as smaller plugs for transplantation from the impacted CAM sites to the mitigation site to re-establish CAM vegetation throughout the mitigation site. Use of the existing CAM to be impacted will maintain genetic diversity and the species composition of CAM vegetation in Potrero Canyon and increase the ability of CAM vegetation to establish self-sustaining vegetation coverage across the mitigation site within the 5-year maintenance and monitoring period.

- Seed collection from CAM species throughout Potrero Canyon will be conducted for multiple seasons prior to CAM impacts to build a substantial supply of local genetic native seed that will be used to establish CAM vegetation at the proposed mitigation site. Seed supplies will be held in storage to provide a ready supply of seed should remedial actions be required to supplement underperforming areas of the mitigation site during the CAM vegetation establishment period.

- Appropriate vegetation performance criteria will be established through measurement of CAM reference sites prior to project impacts. These criteria will be used to inform mitigation site evaluations during the CAM establishment period and will drive adaptive management and remedial actions to maintain the vegetation establishment trajectory toward achievement of ultimate performance criteria.

- A mitigation monitoring program will be developed to support collection of appropriate botanical, vegetation, and hydrology data that directly relate to mitigation performance criteria. Monitoring data and observations will provide essential back-checks and feedback for effective adaptive management decisions to be made and implemented during the vegetation establishment period.

- A mitigation maintenance program will be designed to support vegetation establishment and implement adaptive management decisions during the vegetation establishment period. Maintenance will be focused on non-native vegetation management to promote native vegetation recruitment and establishment of an in situ native seed bank that fosters native recruitment, vegetation community resilience, and ultimately promotes sustainable CAM vegetation communities. Remedial actions will be implemented under the maintenance program to correct site deficiencies and promote successful attainment of mitigation goals.

Vegetation communities associated with Potrero Canyon ephemeral drainages will be successfully mitigated through establishment of comparable wetlands within the reconstructed ephemeral channel that will run through the development project. While skepticism of the success of this effort has been expressed, the facts of the channel and mitigation design support the conclusion that all representative wetlands vegetation communities present in Potrero Canyon and replacement ecological functions and

services can be successfully established in the project context. The following factors support this conclusion:

- The constructed channel will tie in to existing hydraulic inputs at the edge of development, essentially extending the existing hydraulic regime of Potrero Canyon into the new channel. Therefore, the runoff hydrograph of storm events will remain similar in intensity and duration as presently observed and recorded in the existing ephemeral drainage. Therefore, the hydrology of the constructed channel will provide similar scour and deposition functions as the impacted channel. This hydrology function is key to establishing self-sustaining vegetation communities, such as mulefat scrub, southern willow scrub, southern cottonwood-willow riparian forest, and unvegetated streambed.

- Soil salvage will be implemented at impact sites to provide comparable grain size distribution within the constructed channel bottom. Soil salvage and replacement will be used to create a similar soil profile as found in the impacted stream course. This profile will have similar percolation and water retention characteristics as the impacted channel. The soil profile restoration is an essential factor in differentiating native riparian communities along the Potrero stream course, and this physical characteristic will be recreated in the constructed channel.

- The constructed channel design incorporates several grade structures that serve multiple services to the associated vegetation communities. Channel structures will create subsurface hydrology variability that will effectively create moisture gradients that support the desired range of native wetlands vegetation communities. Subsurface moisture retention is anticipated to be greatest immediately upstream of these structures. The resultant mesic wetlands pockets at these locations will support southern cottonwood-willow riparian forest and southern willow scrub vegetation communities. Drier soil conditions and retreating groundwater resources upstream of the structures will favor mulefat scrub and other ephemeral drainage vegetation communities that are capable of persisting without reliable subsurface water. The most xeric conditions are anticipated to occur between grade structures. Coarse bed materials placed at these locations will create non-vegetated waters of the United States. These areas serve as groundwater percolation sites that replenish local groundwater. The high percolation rates associated with these areas will maintain the channel in a non-vegetated state that is typical of many channel reaches in Potrero Canyon.

- A variable channel width will be used to create areas of scour and deposition that are characteristic of the existing canyon. Scour and deposition are important functions that specific wetlands vegetation communities rely upon to persist in a particular location. Providing a variety of scour and deposition features will support diverse wetlands vegetation communities.

- A layer of semi-permeable material such as clay may be used to enhance subsurface water storage and resources for riparian vegetation where southern cottonwood-willow riparian forest and southern willow scrub are planned. This technique is used to perch water resources within the root zone of wetland species.

- Use of local wetlands plant materials will maintain the genetic integrity of the wetlands mitigation site and the species diversity found within Potrero Canyon.

Response 38

The commentor states that the Corps has not demonstrated by science or prior experience that the functions and values of wetlands and tributaries to be impacted can be replaced by the functions and values of the wetlands and tributaries to be created.

As described in Draft EIS/EIR **Subsection 6.5.5** and the Santa Clara River Watershed Study (Dudek 2008A; see **Appendix 4.5** of the Draft EIS/EIR), mitigation measures for activities permitted by CDFG and the Corps between 1988 and 2006 in Los Angeles County and Ventura County have resulted in a cumulative net increase in jurisdictional waters/wetlands in the Santa Clara River Watershed. The Watershed Study estimates that this net increase amounts to approximately 275 acres for Corps waters/wetlands and 316 acres for CDFG waters/wetlands. (See Draft EIS/EIR **Subsection 6.4.1.6**, Corps (Section 404 Permit) Projects, and Draft EIS/EIR **Subsection 6.4.1.8** (CDFG Streambed Projects) for summaries of this analysis.) These estimated net increases are consistent with CDFG's and Corps' "no net loss" policies for wetlands discussed above. Although these acreages assume 100 percent mitigation success, and although it is likely that some of the mitigated acreage has not been successful for various reasons (*e.g.*, poor design, inappropriate soils or hydrology, poor maintenance), it is reasonable to conclude that there has been no net cumulative loss of waters/wetland acreage from agency-permitted activities in the watershed since 1988 because the estimated net increase is 275 acres for Corps permitted activities and 316 acres for CDFG permitted activities. However, as concluded by Ambrose *et al*. (2006), acreage losses and gains resulting from agency-permitted activities do not always reflect wetland functions and values/services. Based on Ambrose *et al.'s* (2006) review of 143 Section 401 Permits across 12 regional water boards and subregions in California, approximately 27 percent of mitigation acreage consisted of drier riparian and upland habitats that were outside of jurisdictional areas. Wildlife species that rely on wetter habitats, such as semi-aquatic amphibians and reptiles, may not use the drier riparian and wetland habitats to the same extent or for certain phases of their life cycle (*e.g.*, reproduction).

Although the success of past permitted activities likely has been mixed with regard to mitigation for impacts to waters and wetland functions and values/services, new projects are approved and constructed with updated technologies for protecting and restoring waters/wetlands. With these new technologies, the functions and values/services of the waters and wetlands within the Santa Clara River Watershed are expected to be enhanced in the future. Specifically, habitat revegetation and restoration practitioners throughout California have developed improved planning and implementation approaches in direct response, or adaptation, to projects they have constructed, monitored, and maintained. More recently, there have been major improvements in the fundamental understanding of baseline habitat conditions, hydrology, vegetation community ecology, and geomorphic parameters for restoration sites. Along with these experiences, implementation techniques have also evolved to optimize restoration performance and sustenance of riparian functions and values/services. These include improved nursery technology, irrigation efficiencies, site preparation techniques, and field engineering during the construction phases of projects.

To this end, the Project applicant would implement conservation measures that are designed to permanently preserve the Santa Clara River Corridor and portions of tributary drainages through the proposed Project reach and to protect and manage the waters/wetlands on the proposed Project site. These conservation measures include previously incorporated mitigation measures from the Newhall Ranch Specific Plan Program EIR and additional mitigation measures recommended in this EIS/EIR. The River Corridor SMA is approximately 977 acres and includes approximately 332 acres of combined southern

cottonwood-willow riparian forest and southern willow scrub. The River Corridor SMA provides restoration and enhancement opportunities for riparian vegetation, and all riparian vegetation permanently removed from the proposed Project will be replaced in kind at a minimum 1:1 ratio for Low Reach Value vegetation (*e.g.,* arrow weed scrub) to a 4:1 ratio for High Reach Value southern cottonwood-willow riparian forest (*e.g.,* see revised Mitigation Measure BIO-2 and (Revised) **Table 4.5-68** in **Subsection 4.5.6**, Mitigation Measures). Implementation of these mitigation measures result in a net increase of wetland/riparian habitat and are expected to improve the overall value of the River Corridor and tributaries, and associated aquatic, semi-aquatic, and riparian wildlife guilds. In addition, conservation measures include protection and enhancement of riparian and wetland habitat in the High Country SMA and Salt Creek area, as well as Open Area, with associated wetland mitigation plans subject to the approval of the Corps and CDFG that ensure no net loss of similar functions and values/services (see Mitigation Measures BIO-1 through BIO-16 in **Subsection 4.5.6**, Mitigation Measures). These conservation measures are also described in detail in the Newhall Ranch Resource Management and Development Plan (Dudek 2008B) found in the Draft EIS/EIR (**Appendix 1.0**).

Response 39

The commentor expresses concern regarding the sustainability of creating ephemeral stream above fill material. The commentor is particularly concerned that the riparian vegetation will not persist so far above groundwater.

As stated by the commentor, hydrology is a crucial component to establish and sustain wetlands over time, and the absence of appropriate wetlands hydrology creates a potentially serious challenge in wetlands creation. The Newhall Ranch Specific Plan Subregional Stormwater Mitigation Plan (NRSP Sub-Regional SWMP) includes hydrologic modeling of the Potrero Canyon watershed showing that that appropriate hydrology can be supported in the elevated channel in conjunction with project stormwater treatment and conveyance systems. **Section 4.2** of the Draft EIS/EIR includes geomorphic design principles for the Potrero Canyon channel has been used to ensure that the channel will support dynamic equilibrium that, combined with the appropriate hydrology, can sustain wetlands and riparian habitats that presently exist in Potrero Canyon. Restoration would be further enhanced through salvage and replacement of a substantial section of the channel soil profile in the new channel. Therefore, the mitigation design will utilize the same grain size of bed material present in the existing channel.

Response 40

The commentor expresses concern that impacts to special aquatic sites in Potrero Canyon will result in impacts to the Santa Clara River, as expressed in Section IV of the comment letter.

See **Responses 33 through 39**, above. With implementation of the proposed mitigation for impacts to Potrero Canyon, there will be no net loss of functions and services/values to special aquatic sites in Potrero Canyon, nor would there be any impacts to the Santa Clara River.

Response 41

The comment states that prior to granting a permit, the Corps must ensure that the proposed Project complies with the CWA section 404(b)(1) Guidelines and is not contrary to the public interest. The comment is a correct statement of the law, and no further response is provided. The Corps' final 404(b)(1)

alternatives analysis and evaluation of public interest factors will be included in the record of decision (ROD).

Response 42

The comment states that there is currently not enough information to determine whether the proposed discharge complies with applicable regulations related to alternatives analysis, endangered species, water quality, significant degradation, and/or mitigation. Since the release of the PN and the Draft EIS/EIR, the draft 404(b)(1) alternatives analysis has been circulated to the USEPA for review and is presented in **Appendix F1.0** of the Final EIS/EIR.

Response 43

The comment states that, based on the information presented to date, the applicant has not demonstrated that the proposed Project complies with any of the restrictions to discharges under the CWA section 404(b)(1) Guidelines. Since the release of the PN and the Draft EIS/EIR, the draft 404(b)(1) alternatives analysis has been circulated to the USEPA for review and is presented in **Appendix F1.0** of the Final EIS/EIR.

Response 44

The comment states that once the applicant completes preparation of the 404(b)(1) Alternatives Analysis for the proposed Project, USEPA would like the opportunity to review and comment on the analysis. Since the release of the PN and the Draft EIS/EIR, the draft 404(b)(1) alternatives analysis has been circulated to the USEPA for review.

Response 45

The comment reaffirms USEPA's previous statement that there is currently insufficient information to make a finding of compliance with the CWA section 404(b)(1) Guidelines, and urges the Corps to deny the permit application. Since the release of the PN and the Draft EIS/EIR, the draft 404(b)(1) alternatives analysis has been circulated to the USEPA for review. Based on information in the Final EIS/EIR and the preliminary conclusions in the draft 404(b)(1) alternatives analysis, the Corps has identified a Draft LEDPA, which includes substantial additional avoidance and minimization of impacts to aquatic resources in the Project area. The Corps acknowledges USEPA's request to deny the permit, but the Corps will not make any final decisions regarding issuance or denial of the permit until the completion of the ROD.