

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX

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May 1, 2007

Colonel Ronald N. Light
District Engineer, Sacramento District
U.S. Army Corps of Engineers
1325 J Street, 14th floor
Sacramento CA, 95814-2922

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Re: Public Notice # 199900737 Placer Vineyards Specific Plan.

Dear Colonel Light:

We have reviewed the public notice (PN) of March 13, 2007 regarding an application for 24 Department of the Army permits and Notice of Intent to prepare an Environmental Impact Statement for mixed use development proposed in the Placer Vineyards Specific Plan (PVSP). We support the joint notice and evaluation of these related projects, as this approach will facilitate improved consideration of cumulative effects and identification of appropriate avoidance and mitigation needs at an appropriate geographical scale. We also appreciate extending the comment period to May 12, 2007. We are providing the attached comments under the authority of, and in accordance with, the provisions of the Federal Guidelines promulgated under Section 404(b)(1) of the Clean Water Act (CWA) at 40 CFR 230 (the Guidelines).

According to the PN, the proposed PVSP is a mixed-use master planned community with residential, employment, commercial, open space, recreational and public land uses. The proposed 3,996 acre project site is located in the southwestern portion of unincorporated Placer County. At approximately 33,000 people.

There are approximately 156 acres of waters within CWA jurisdiction (waters) on-site, including Dry Creek, wetlands, and vernal pools. PVSP proposes to fill approximately 102.7 acres of these interconnected waters, including approximately 28.5 acres of vernal pools, 25.8 acres of seasonal depressional wetlands, 11.4 acres of riverine seasonal wetland, and 37 acres of integrated seasonal wetlands, streams, and other waters. The PN illustrates varying degrees of water body and wetland avoidance among the 24 Individual Permit proposals, but provides insufficient information to inform a detailed analysis of each individual project. While we are responding to the PVSP PN as a whole, we recognize separate individual permits will be needed and intend to focus on those permits with a relatively greater area of jurisdictional waters and/or little proposed avoidance.

Vernal pools complexes, comprised of interconnected pools, wetlands and other waters are high value aquatic resources that provide habitat for federally threatened and endangered species. Some of the species that vernal pool complexes support occur only in California. High rates of biodiversity and endemism within vernal pool ecosystems and the large-scale destruction and

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degradation of these ecosystems have increased the importance of the vernal pools and interconnected aquatic resources that remain. Statewide, as much as 85% of the original distribution of vernal pool complexes has been lost to development, and up to 33% of the original crustacean species that depend upon vernal pool habitat (e.g., fairy shrimp) may have already become extinct due to habitat destruction. Between 1994 and 1997 Placer County lost approximately 500 acres of vernal pools per year, and the County's continuing high rate of development threatens remaining vernal pool complexes. Due to the high ecological value and increasing rarity of these systems, EPA considers vernal pool complexes to be aquatic resources of national importance (ARNI).

Based on information provided in the PN, it does not appear that the proposed project complies with the Guidelines' requirements for avoidance and minimization (40 CFR 230.10). Regulated waters cover only approximately 4% of the project site; however, the PVSP proposes to permanently impact 66% of the on-site aquatic resources. EPA believes that project alternatives having fewer impacts to aquatic resources are available and viable. For example, if all on-site waters were avoided, 96% of the project site would remain available for development. The PN indicates that the applicants propose to develop only 83% of the project site and maintain 17% of the site as open space. Based on this information, it appears reasonable that a practicable project alternative can be developed to avoid all or nearly all of the 156 acres of on-site waters. No alternatives analysis has been provided for this project to date. Given the low percentage of waters on-site and the high percentage of proposed fill to these waters, it seems unlikely that the applicants have fully explored all opportunities to avoid direct discharges of fill material to waters. The Guidelines limit issuing permits to only those projects that avoid waters to the maximum extent practicable.

The EPA finds that this project may have substantial and unacceptable impacts to aquatic resources of national importance. Therefore, we recommend denial of the project, as currently proposed. This letter follows the field level procedures outlined in the August 1992 Memorandum of Agreement (MOA) between the Environmental Protection Agency and the Department of the Army, Part IV, paragraph 3(a) regarding Section 404(q) of the Clean Water Act. Direct project impacts to vernal pools and interconnected aquatic resources would reduce the site's abundance and diversity of native habitat, terrestrial wildlife, and aquatic species and would contribute to the cumulative losses of vernal pools which currently exceed 85% of historic distribution. The magnitude of proposed fill to these valuable resources is unacceptable considering that jurisdictional waters cover such a small percentage of the project site. We also recommend that the applicant coordinate closely with Placer County officials to align meaningfully with ongoing development of the Placer County Conservation Plan.

Staff from EPA and the Army Corps of Engineers met with individuals representing the project applicants on December 20, 2006 to discuss the process for completing the CWA application process for PVSP. EPA supports the applicants' efforts to consolidate projects having the same infrastructure needs into one Environmental Impact Statement for purposes of fulfilling NEPA requirements and providing a base of information to support 24 CWA Individual Permit actions. The value of on-site aquatic resources and the potential for further avoidance of impacts to these

¹ King, J. L. (1996). Loss of Diversity as a Consequence of Habitat Destruction in California Vernal Pools. Ecology, Conservation, and Management of Vernal Pool Ecosystems, Sacramento, California Native Plant Society. ²CDFG (1998) Changes in Great Valley Vernal Pool Distribution from 1989 to 1997. Report to CDFG, Author Robert F. Holland. http://www.dfg.ca.gov/whdab/wetlands/vp_holland/report_index.htm.

resources support the use of CWA regulatory tools to ensure compliance with the Guidelines. We look forward to working collaboratively with the applicant and the Corps through the NEPA and CWA process to reduce project impacts to a permittable level.

We respectfully request that you do not authorize the project at this time in consideration of our concerns. We look forward to working with your staff and the applicant to resolve the important environmental issues surrounding the proposed project. If you wish to discuss this matter further, please call me at (415) 972-3572 or refer your staff to David Smith, Chief of our Wetlands Regulatory Office at (415) 972-3464.

Sincerely,

Alexis Strauss, Director

Water Division

cc:

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Detailed EPA Comments PN# 199900737 for the proposed Placer Vineyards Project

I. Project Site

According to the public notice (PN), the Placer Vineyards Specific Plan (PVSP) area includes approximately 5,227 acres, 3,996 acres of which are proposed for urban development under the PVSP. The remaining 1,231 acres are reserved as a "Special Planning Area" or are non-participating properties that would continue to be used as rural residential unless the individual landowners apply for zone changes in the future. Most of the properties included in the PVSP are undeveloped parcels characterized by flat to slightly undulating terrain that support a predominance of open grassland habitat. These areas have been used for livestock grazing and/or crop cultivation in the past.

The PN describes PVSP as a mixed-use master planned community with residential, employment, commercial, open space, recreational and public land uses. The proposed project is located in the southwestern portion of unincorporated Placer County and includes approximately 2,423 acres of residential units, 280 acres of commercial units, 53 acres of public facilities, 92 acres of religious facilities, 140 acres of educational sites, 217 acres of parks, 330 acres of major roadways, and 714 acres of open space. Full build-out of PVSP is expected to occur over 20-30 years and will provide 14,132 residential units for a population of approximately 33,000 people.

II. Elevation of Individual Permit Decisions under CWA 404(q) MOA

Pursuant to the 1992 Memorandum of Agreement between the Environmental Protection Agency (EPA) and the Department of the Army per Clean Water Act ("CWA") Section 404(q), it appears that authorization of the proposed project may result in unacceptable adverse effects to aquatic resources of national importance (ARNIs). The wetlands in question are considered special aquatic sites under the Guidelines, and the vernal pool complexes on the project site support a diversity of unique plants and animals.

Aquatic Resources of National Importance

Placer County lies within the California Floristic Province, a "biodiversity hotspot" recognized internationally for its high levels of species endemism, in part due to the presence of vernal pools and associated water resources. Statewide, as much as 85% of vernal pools have been lost to development, and up to 33% of the original crustacean species that depend upon vernal pool habitat (e.g., fairy shrimp) may have already become extinct due to habitat destruction. The mosaic of aquatic and terrestrial habitats on the project site are potential habitat for State and federally-listed species such as vernal pool fairy shrimp, vernal pool tadpole shrimp, Northwestern pond turtle,

³ http://www.biodiversityhotspots.org/xp/Hotspots/hotspotsScience/hotspots_defined.xml and http://www.biodiversityhotspots.org/xp/Hotspots/california_floristic/

King, J. L. (1996). Loss of Diversity as a Consequence of Habitat Destruction in California Vernal Pools. Ecology, Conservation, and Management of Vernal Pool Ecosystems, Sacramento, California Native Plant Society.

Swainson's Hawk, burrowing owl, Prairie Falcon, Golden eagle, and tri-colored blackbird. The high rates of endemism within vernal pool ecosystems and the large-scale destruction and degradation of these ecosystems have increased the importance of the landscapes that remain. Between 1994 and 1997 Placer County lost approximately 500 acres of vernal pools per year, and it appears this vigorous pattern of loss has continued, as Placer is one of California's fastest growing counties.

The PVSP site is a relatively large and unfragmented mosaic of vernal pool and grassland habitat. According to the PN, the site is characterized by integrated waters and wetlands including approximately 34.6 acres of vernal pools, 27.6 acres of seasonal depressional wetlands, 15.5 acres of seasonal wetland swales, 17.8 acres of intermittent drainages, 22.8 acres of riverine seasonal wetland and marsh, 18 acres of ponds, and 25.7 acres of other types of waters. The primary aquatic features that comprise vernal pool complexes (vernal pools, swales, seasonal depressional wetlands) account for approximately half of the on-site waters, while linear features, associated wetlands, and ponds make up the remainder.

This area of Placer County has a limited supply of opportunities for vernal pool compensatory mitigation and is considered an important part of a large-scale conservation plan for Placer County's aquatic and natural resources. Large portions of the PVSP site have been considered appropriate for conservation in 4 of the 16 alternative scenarios of the Placer County Conservation Plan (PCCP)⁷. If current efforts focused on protecting aquatic resources at the regional level are to succeed, avoidance of aquatic resources in a conservation strategy that provides for the long-term viability of aquatic resources is vital. The vernal pools complexes on the PVSP site appear to serve an important role in the conservation and development strategy for western Placer County.

Substantial and Unacceptable Impacts

The proposed project impacts to vernal pools and integrated aquatic features are substantial and unacceptable based on the magnitude of fill, lack of sufficient avoidance, and historical losses of these wetland types in the area. Project construction will result in the permanent loss of approximately 102 acres of waters and wetlands (28 acres of vernal pools, 26 acres of seasonal depressional wetlands, 11 acres of riverine seasonal wetland, and 37 acres of integrated seasonal wetlands, streams, and other waters). The current proposal includes filling approximately 82% of on-site vernal pools and 66% of all on-site waters. Similar to other types of wetlands and streams, vernal pools are dependent on interconnected water sources and immediately adjacent upland areas to function as wetlands and retain value as aquatic habitat. The filling of these aquatic resources:

- permanently destroys habitat for aquatic species and wildlife including endangered and special status species,
- causes a potentially irreversible loss of biodiversity, ecosystem stability, and valuable aquatic resources (see section on Significant Degradation), and
- may lead to decreased floodwater retention, increased sediment transport and runoff.

⁵ Placer Vineyards Specific Plan Revised Draft Environmental Impact Report. March 2006. Section 4, pages 4.4-11 through 4.4-14. http://www.placer.ca.gov/CommunityDevelopment/EnvCoordSvcs/PVineyards.aspx

⁶CDFG (1998) Changes in Great Valley Vernal Pool Distribution from 1989 to 1997. Report to CDFG, Author Robert

F. Holland. http://www.dfg.ca.gov/whdab/wetlands/vp_holland/report_index.htm.

Staff Report to Placer County Board of Supervisors (January 23, 2007). "Placer County Conservation Plan – Consideration of the Selection of Preferred Alternative Reserve Map." http://www.placer.ca.gov/CommunityDevelopment/Planning/PCCP.aspx

In addition, many of the seasonal wetlands and streams proposed for direct fill may impact avoided pools by altering the sediment and water supply through increasing impervious services and burying streams into pipe culverts. Lastly, the proposal to forego avoidance and fill 82.3% of on-site vernal pools and 66% of on-site aquatic resources is unacceptable given that all or nearly all the waters could be avoided by realigning the 700 acres of planned open space.

III. Clean Water Act Compliance

The purpose of the Section 404(b)(1) Guidelines is to restore and maintain the chemical, physical, and biological integrity of waters of the United States. These goals are achieved, in part, by prohibiting discharges of dredged or fill material that would result in avoidable or significant adverse impacts on the aquatic environment. The burden to demonstrate compliance with the guidelines rests with the permit applicant. The Guidelines contain four main requirements each of which must be complied with to obtain a Section 404 permit:

- 1. Section 230.10(a) prohibits a discharge if there is a less environmentally damaging practicable alternative to the proposed project. These alternatives are presumed for non water dependent activities in special aquatic sites.
- 2. Section 230.10(b) prohibits discharges that will result in a violation of the water quality standards or toxic effluent standards, jeopardize a threatened or endangered species, or violate requirements imposed to protect a marine sanctuary.
- 3. Section 230.10(c) prohibits discharges that will cause or contribute to significant degradation of the waters of the United States. Significant degradation may include individual or cumulative impacts to human health and welfare; fish and wildlife; ecosystem diversity, productivity and stability; and recreational, aesthetic or economic values.
- 4. Section 230.10(d) prohibits discharges unless all appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem.

The applicant proposes to fill wetlands and vernal pools, aquatic resources considered special aquatic sites which are afforded a higher level of protection by CWA regulations. The Guidelines consider the degradation or destruction of special aquatic sites to be among the most severe environmental impacts that cause a potentially irreversible loss of valuable aquatic resources (40 CFR 230.1(d)).

Alternatives Analysis-40 CFR 230.10(a)

Compliance with the Guidelines requires the applicant to clearly demonstrate that the "preferred" alternative is the Least Environmentally Damaging Practicable Alternative (LEDPA) that achieves the overall project purpose. In addition, the Guidelines presume the existence of project alternatives that do not include discharges of fill material to special aquatic sites when the project is not water dependent (40CFR230.10(a)(3)).

Alternatives

The applicants will be providing information regarding project alternatives to the Corps in order to complete the CWA and NEPA processes and we provide the following guidance to support these efforts. Identification of the LEDPA is achieved by performing an alternatives analysis that estimates the direct, secondary, and cumulative impacts to jurisdictional waters resulting from a set

of on- and off-site project alternatives. As the project purpose, mixed-use residential development, is not water-dependent, the applicant would have to demonstrate the impracticability of project alternatives that would not require the discharge of dredged or fill material into special aquatic sites. The alternatives analysis should evaluate alternatives that:

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- fully avoid fill,
- avoid placement of fill in the vernal pool complexes on the western portion of the site, and
- provide for conservation consistent with the conservation footprint options being considered in the PCCP process.

An evaluation of the long-term viability of avoided resources in on-site preserve designs for various alternatives can inform the LEDPA determination.

Analysis of project impacts is commensurate with the magnitude of impacts to aquatic resources. Fewer impacts to aquatic resources require a less comprehensive alternatives analysis. Greater consideration should be given to on-site alternatives that optimize avoidance of aquatic resources.

Impact Assessment

The alternatives analysis must evaluate direct, secondary, and cumulative impacts for on- and off-site alternatives for the proposed project. Secondary effects include: (1) changes in the hydrology and sediment transport capacity of Dry Creek and associated tributaries resulting from filling tributaries and wetlands; (2) increases in impervious surfaces and the corresponding increases in the volume and velocity of polluted stormwater; (3) decreases in water quality from the impairment of ecosystem services such as water filtration, groundwater recharge, and the attenuation of floods; (4) disruption of hydrological and ecological connectivity between aquatic resources filled, altered, or degraded on-site and off-site wetlands and vernal pools; and (5) decreases in biodiversity and ecosystem stability.

Cumulative impacts include past, present and reasonably foreseeable direct and secondary impacts to the aquatic environment. Historical impacts on aquatic ecosystems include California's rapid population growth and resulting losses of approximately 95% of the State's wetlands¹⁰ and up to 85% of the vernal pools. Tens of thousands of acres of land supporting vernal pools and related ecosystems are threatened by numerous proposed developments in western Placer County. PVSP and other proposed development areas potentially impact 50% of the remaining vernal pool complexes in western Placer County. Pending and reasonably foreseeable projects include, but are not limited to, the Placer Parkway, Creekview Specific Plan, Sierra Vista Specific Plan, and the Placer Ranch Specific Plan.

LEDPA

As stated in the cover letter, the proposed project does not appear to be the LEDPA due to the low acreage of on-site waters avoided and the magnitude of proposed fill. It seems practicable and reasonable to avoid all or nearly all the on-site waters.

⁸ Secondary effects are defined by the Guidelines as effects on an aquatic ecosystem that are associated with a discharge of dredge or fill materials but do not result from the actual placement of the dredged or fill material (40 CFR 230.11(h)). Cumulative effects are defined by the Guidelines as changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual discharges of dredged or fill material (40 CFR 230.11(g)).

Dahl, T.E. 1990. Wetland losses in the United States 1780's to 1980's. U.S. Fish and Wildlife Service, Washington, D.C.

¹¹ GIS data collected by Placer County.

Significant Degradation - 40 CFR 230.10(c)

The Guidelines prohibit granting a permit for a project that causes or contributes to significant degradation of aquatic resources. Effects contributing to significant degradation include significantly adverse effects resulting from the discharge of fill material into regulated waters such as: (1) loss of fish and wildlife habitat (40 CFR 230.10(c)(3)), (2) reduction of biological productivity caused by smothering wetland habitat (40 CFR 230.41), and (3) impairment or destruction of endangered species habitat (40 CFR 230.30(2)).

PVSP may cause or contribute to significant degradation of on site aquatic resources because discharging fill material into approximately 80 acres ¹² of special aquatic sites will smother and kill aquatic life, permanently destroy habitat for wildlife dependent on these aquatic features, and subsequently reduce on-site ecosystem diversity, productivity, and stability. The proposed fill will destroy habitat for wildlife dependent on the on-site aquatic resources. Approximately 2000 acres of the PVSP site are considered important concentration areas for the Pacific Flyway, ¹³ a North American route for migratory birds that depend on aquatic resources in California's Central Valley for water and foraging habitat.

Vernal pools and their associated aquatic features support some of the most biologically diverse aquatic ecosystems in California and the United States. Destroying vernal pools and associated aquatic resources represents a potentially irreversible loss of biodiversity and valuable aquatic resources (40 CFR 230.1(d)), is considered a significant adverse effect by the Guidelines (40 CFR 230.41), and therefore may cause or contribute to significant degradation. Similarly, the mosaic of aquatic and terrestrial habitats on the project site are potential habitat for state special status and federal threatened and endangered species such as vernal pool fairy shrimp, vernal pool tadpole shrimp, Northwestern pond turtle, Swainson's Hawk, burrowing owl, Prairie Falcon, Golden eagle, and tri-colored blackbird. Destruction of these habitat resources for endangered and threatened species would be considered significantly adverse by the Guidelines and therefore may cause or contribute to significant degradation.

Minimization-40 CFR 230.10(d)

Failure to adequately offset project impacts is grounds for denial of the permit application, and it is not clear the applicants are able to compensate for proposed project impacts. CWA regulations and guidance require all appropriate and practicable steps be taken to avoid and minimize direct impacts to aquatic resources and to compensate for unavoidable discharges of dredged or fill material into waters (40 CFR 230.10(d)).

¹² Estimated from information provided in the public notice and CWA 404 permit application.

¹³ Placer Vineyards Specific Plan Final Environmental Impact Statement (December 2006). Figure 6. http://www.placer.ca.gov/upload/cdr/ecs/pvsp/feirdec06/pvsp-feir-vol-i-sec-3-pgs372-494.pdf

http://www.biodiversityhotspots.org/xp/Hotspots/hotspotsScience/hotspots defined.xml and http://www.biodiversityhotspots.org/xp/Hotspots/california floristic/

Placer Vineyards Specific Plan Revised Draft Environmental Impact Report. March 2006. Section 4, pages 4.4-11 – 4.4-14. http://www.placer.ca.gov/CommunityDevelopment/EnvCoordSvcs/PVineyards.aspx

Specifically, it is important to: (1) increase the proposed avoidance and minimization; (2) document that the remaining proposed impacts are unavoidable; and (3) provide a compensatory mitigation plan for review. There are numerous challenges to compensating for impacts to the functions and values provided by vernal pools in western Placer County. For example, Caltrans and private developers have reported a shortage of available compensatory mitigation opportunities in Placer County to compensate for the unavoidable impacts of pending projects. Mitigation opportunities in nearby counties are also constrained. Local mitigation is strongly preferable to address unavoidable project impacts. Therefore, permit applicants must take all appropriate and practicable steps to avoid and minimize impacts to special aquatic sites and other jurisdictional waters to reduce the need for compensatory mitigation.

As the applicants make progress avoiding and minimizing impacts, the need for specific information about proposed compensatory mitigation sites becomes increasingly important. Specific information includes delineations of waters of the US, proposed long-term management plans, proposed third-party management entity with documented capability, estimated endowment, and proposed easement language for protection of the resources in perpetuity. For example, we would not consider lands proposed for 1:1 open space mitigation as compensation for impacts to aquatic resources without first knowing the amount and type of delineated waters on-site and any proposed plans for creation and/or enhancement. Uplands contained within the proposed open space mitigation site are not appropriate compensation for impacts to waters.