APPENDIX 1.0

Scoping Summary Report and Draft General Permit

U.S. Army Corps of Engineers—Placer Vineyards Specific Plan EIS

DRAFT SUMMARY SCOPING REPORT

INTRODUCTION

This document is a scoping report in support of an Environmental Impact Statement (EIS) being prepared for the Placer Vineyards Specific Plan (PVSP) project. The US Army Corps of Engineers (USACE), Sacramento District is the federal lead agency under NEPA.

Proposed Action

The 5,230-acre (2,116-hectare) PVSP area is located in the southwest portion of unincorporated Placer County, approximately 15 miles (24 kilometers) north of Sacramento, and southwest of the City of Roseville (**Figure 1**).

The PVSP includes development of the 5,230-acre (2,116-hectare) site with a mix of land uses, predominantly residential use with some commercial and office uses, public and quasi-public uses, parks, and open space, and the infrastructure improvements to support these uses. The USACE has received 22 Department of the Army (DA) permit applications to develop up to 3,746 acres (1,516 hectares) of land within the PVSP area and an application for the development of backbone infrastructure. The owners of the remaining properties (comprising 505 acres [204 hectares] within the PVSP area outside of the Special Planning Area (SPA) and 979 acres [396 hectares] within the SPA) are not applying for DA permits at this time. However, for purposes of the EIS, the Proposed Action encompasses the development of the entire PVSP site consistent with the footprint of the County-approved PVSP. The proposed land use plan under the PVSP is shown on **Figure 2**.

The federal action currently under analysis is the review and approval of Section 404 permits that, if approved, would allow the Applicants to fill approximately 108.2 acres[1] of jurisdictional waters of the United States in conjunction with the development of a large-scale, mixed-use master-planned community on the project site in unincorporated Placer County.

1 Includes about 104 acres of impact on-site on properties for which permit applications have been filed and from the on-site backbone infrastructure, and 4.2 acres of impact off-site associated with off-site infrastructure improvements.

Permits and Approvals

Permits and approvals required to construct and operate the Proposed Action are summarized below.

Federal Approvals

- Clean Water Act Section 404 permits, including 22 individual permits and a Regional General Permit for the infrastructure improvements, from the USACE.
- Endangered Species Act, Section 7 consultation and authorization from USFWS.
- National Historic Preservation Act, Section 106 compliance and concurrence by the State Historic Preservation Office.

State Approvals

- Clean Water Act, Section 401 Water Quality Certification from the Central Valley Regional Water Quality Control Board (CVRWQCB).
- A Clean Water Act, Section 402 National Pollutant Discharge Elimination System (NPDES) permit from CVRWQCB.
- A Master Reclamation permit for recycled water delivery and use from CVRWQCB.
- A California Endangered Species Act/California Fish and Game Code Section 2081 take authorization from the California Department of Fish and Wildlife (CDFW).
- A California Fish and Game Code Section 1602 Streambed Alteration Agreement from CDFW.

Local Approvals

- Reorganization (Annexation/Detachments) for service area boundary adjustments and/or service contracts by Placer County Local Agency Formation Commission (LAFCO) and Placer County Sewer Maintenance District.
- Approval of school district boundary changes by Grant Joint High School District, Center Unified School District, Elverta Joint School District, and Placer County Board of Education.

Alternatives

In addition to the Proposed Action, several alternatives have been developed for analysis at an equivalent level of detail pursuant to NEPA. These alternatives include:

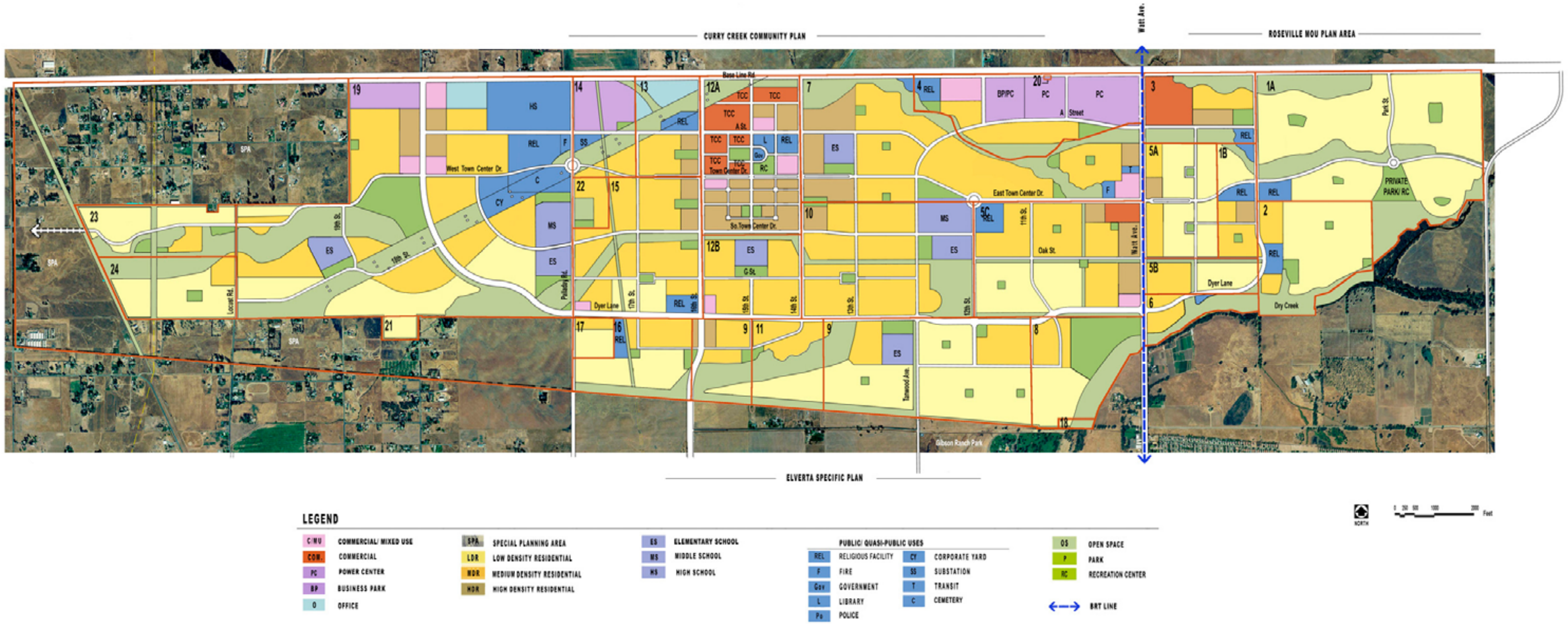
NOT TO SCALE

SOURCE: Google Maps – 2012

FIGURE **1**

Regional Location

1090-002•01/12



SOURCE: County of Placer – 2007

FIGURE **2**

Proposed Action – Base Plan Scenario Land Use Plan

No Action Alternative

Under the No Action Alternative, the project site would be developed in a manner that avoids activities in jurisdictional waters of the United States, including wetlands, thereby avoiding the need for the USACE approvals under Section 404 of the Clean Water Act. However, local approvals from the County and the state would still be required.

Alternative 1

Alternative 1 involves an alternative land use plan that would avoid wetlands on Property 1B, a 56-acre (23-hectare) property located in the eastern portion of the project site.

Alternative 2

Alternative 2 involves an alternative land use plan that would modify the proposed land uses and provide additional avoidance of wetlands on the 101-acre (41-hectare) Property 3 which is located in the northeastern portion of the project site.

Alternative 3

Alternative 3 involves an alternative land use plan that would avoid a large cluster of wetlands (totaling approximately 4 acres [2 hectares] of jurisdictional wetlands) on Property 16, a 94-acre (38-hectare) property located in the southwestern portion of the project site.

Alternative 4

Alternative 4 involves an alternative land use plan to provide additional wetland avoidance (totaling 0.13 acre [0.05 hectare] of jurisdictional wetlands) on Property 17, a 20-acre (8-hectare) property in the southwestern portion of the project site.

Alternative 5

Alternative 5 involves an alternative land use plan that would avoid a large cluster of wetlands totaling approximately 4.5 acres (1.8 hectares) on Property 23, a 93-acre (38-acre) property located in the western portion of the project site.

Combined Alternatives 1 through 5

Combined Alternatives 1 through 5 would involve a land use plan that would be the same as the Proposed Action for all properties that make up the site except Properties 1B, 3, 16, 17, and 23

where the land use plans presented under Alternatives 1 through 5 would be implemented. As a result filling of an additional 9.2 acres (3.7 hectares) of wetlands on Properties 1B, 3, 16, 17, and 23 would be avoided.

2.0 NOTICING

Notice of Intent

In compliance with requirements set forth in NEPA, USACE prepared a Notice of Intent (NOI) describing the intent to prepare an EIS under the authority of Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. The NOI described the Proposed Action, potential wetland impacts, and mitigation strategies. The NOI included information about the scoping meeting times and locations, the information regarding the Applicants, and contact information for submitting contacts. The NOI was posted in the Federal Register, the United States Government's official noticing and reporting publication, on March 13, 2007. The official 30 day comment period for the NOI was March 13, 2007 to April 12, 2007.

Two scoping meetings were held at 3:00 PM and 6:00 PM on March 28, 2007, at the Placer County Community Development Resource Center, Planning Commission Hearing Room, 3091 County Center Drive, in the City of Auburn. Representatives from the USACE and the Applicants were in attendance. No comments on the scope of the EIS were received at the scoping meetings.

3.0 PUBLIC FEEDBACK

This section of the report summarizes the comments provided by the public and agencies during the scoping process. This summary is based on both written and verbal comments that were received during the public scoping period. Seven comment letters were received from the public and agencies regarding this EIS during the scoping period, as listed below in **Table 1, Index to Comments**.

Table 1
Index to Comments

Letter Date	Agency/Individuals
Federal/State Agencies	
May 1, 2007	U.S. Environmental Protection Agency - Alexis Strauss
May 8, 2007	U.S. Fish and Wildlife Service - Ken Sanchez California Department of Fish and Game - Sandra Morey National Marine Fisheries Service - Maria Rea
May 31, 2007	U.S. Environmental Protection Agency - Wayne Nastri
April 11, 2007	U.S. Environmental Protection Agency- Summer Allen
Organizations	
May 11, 2007	Sierra Club - Terry Davis
May 12, 2007	California Native Plant Society - Carol Witham
May 12, 2007	Defenders of Wildlife - Kim Delfino
Individuals	
March 22, 2007	Landowner - Esther McCoy

There were a number of environmental concerns raised during the public scoping process. The majority of comments were concerned with impacts of the Proposed Action related to filling wetlands. Some commenters expressed concerns about wildlife habitat and plant species affected by filling wetlands. Comments were also concerned with the range of alternatives to the Proposed Action evaluated in the Draft EIS. **Table 2, Comment Matrix** summarizes the comments by letter.

Table 2
Comment Matrix

Issue	Comment
Alexis Strauss, U.S. Environmental Protection Agency	
Project Description	The Guidance requires the applicant to clearly demonstrate that the "preferred" alternative is the Least Environmentally Damaging Practicable Alternative (LEDPA) that achieves the overall project purpose (40 CFR 230). The project does not appear to comply with the Clean Water Act (CWA) Section 404(b)(1) Guidelines' (Guidelines) requirements for avoidance and minimization (40 CFR 230.10).
Biological Resources	Regulated waters cover only 4% of the project site, so it seems reasonable that a practicable project alternative can be developed that avoids all or nearly all on-site waters. The low acreage of on-site waters and the magnitude of proposed fill could be explored by the applicants to avoid direct discharges of fill material to waters. The magnitude of proposed fill to valuable aquatic resources is unacceptable considering that jurisdictional waters cover such a small percentage of the site. It appears reasonable that a practicable project alternative could be developed to avoid all or nearly all of the on-site waters.
Coordination	The applicants should coordinate with Placer County officials who are developing the Placer County Conservation Plan (PCCP).
Biological Resources	***Aquatic Resources of National Importance*** The vernal pool complexes on the site appear to serve an important role in the conservation and development strategy for western Placer County. Vernal pool complexes on the project site are considered to be aquatic resources of national importance (ARNI). The project may have substantial and unacceptable impacts to ARNI. Therefore, EPA recommends denial of the project as currently proposed.
Biological Resources	***Substantial and Unacceptable Impacts*** 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 of the waters could be avoided by realigning the 700 acres of planned open space.
Biological Resources	***Alternatives*** The alternatives analysis should evaluate alternatives that fully avoid fill, avoid placement of fill in 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. Greater consideration should be given to on-site alternatives that optimize avoidance of aquatic resources.

Issue	Comment
Impact Analysis	***Impact Assessment*** The alternatives analysis must evaluate direct, secondary, and cumulative impacts for on- and off-site alternatives for the proposed project.
Biological Resources	***LEDPA*** The project does not appear to be the least environmentally damaging practicable alternative (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 of the on-site waters.
Biological Resources	**Significant Degradation – 40 CFR 230.10(c)** The project may cause or contribute to significant degradation of on-site aquatic resources because discharging fill material into approximately 80 acres of special aquatic sites will smother and kill aquatic life, permanently destroy unique habitat, and subsequently reduce on-site ecosystem diversity, productivity, and stability.
Biological Resources	**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 that the applicants are able to compensate for proposed project impacts. There are limited compensatory mitigation opportunities in Placer County to compensate for the unavoidable impacts of pending projects. Local mitigation is strongly preferable to address unavoidable project impacts. The 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.
Biological Resources	Uplands contained within the proposed open space mitigation site are not appropriate compensation for impacts to waters of the U.S.
Ken Sanchez, U.S. Fish and Wildlife Service **Sandra Morey, California Department of Fish and Game** **Maria Rea, National Marine Fisheries Service**	
Biological Resources	The agencies recommend that the DEIS analyze and discuss all reasonably foreseeable direct and indirect project-related impacts on biological resources due to project implementation. Focus particularly on the presence of and potential habitats for all state and federally listed species and species of concern, as well as adjacent habitats outside of the project area. In addition, address the direct, indirect, and cumulative project impacts to these species and their respective habitats.

Issue	Comment
Biological Resources	The agencies recommend that the DEIS identify and discuss feasible compensation measures to address all reasonably foreseeable project-related impacts on biological resources. This must include identification of measures that compensate, avoid, minimize, or otherwise offset all projects impacts on special status species and critical habitat. Discuss off-site mitigation through acquisition of existing natural habitats, restoration of former natural habitats to a condition sufficient for compensation, and creation of natural habitats
Biological Resources	The agencies recommend that the DEIS identify all off-site lands to be utilized as compensation for project impacts, including a comprehensive discussion of the ecological values within identified parcels. The lands to be used as compensation for project actions are recommended to be obtained in fee title and that easements not be considered as the primary acquisition tool.
Project Description	The DEIS should identify off-site infrastructure improvements required as part of the project and evaluate the potential impacts of those improvements. The DEIS should identify and analyze compensation measures to avoid, substantially lessen, of offset all foreseeable direct and indirect impacts to biological resources.
Biological Resources	The DEIS should evaluate the contribution of the project to habitat fragmentation and population isolation of plants and animals. The DEIS should identify and analyze compensation measures to avoid, substantially lessen, of offset all foreseeable direct and indirect impacts.
Biological Resources	The DEIS should analyze projects impacts to winter migratory birds, particularly waterfowl of the Pacific Flyway, and describe measures to avoid impacts.
Biological Resources	Off-site compensation areas must be adequately sized, appropriately configured, and biologically justified in meeting the standard no net loss of value and function of wetland resources and to adequately offset project impacts on federally listed invertebrates. Compensation must not be solely justified based on any actual or suggested requirement of Placer County.
Alternatives	The DEIS should include alternative design scenarios, both on- and off-site, for the proposed project that will achieve most of the project objectives, and avoid or substantially lessen the project-related impacts on biological resources.
Alternatives	The DEIS should include an alternative design that reduces overall project impact by the exclusion of development from the western third of the project area and by avoidance of areas with extensive vernal pool and grassland resources.

Issue	Comment
Hydrology and Water Quality	The DEIS should fully disclose issues related to direct, indirect, and cumulative impacts to water quality. Maintain a continuous riparian conservation corridor along Dry Creek. Incorporate LIDS and delineate water quality infrastructure to resolve impacts to water quality. The DEIS should consider effects to listed fish species and habitat from associated wastewater treatment facilities and operations for the project.
Biological Resources	The DEIS should consider effects to listed fish species and habitat from water supply to the project. Diversion of freshwater inflows from the Sacramento and American Rivers to provide water for Placer Vineyards may negatively affect several listed fish species and their designated critical habitat, specifically delta smelt (*Hypomesus transpacificus*), winter-run Chinook salmon (*Oncorhynchus tshawytscha)*, Central Valley spring-run Chinook salmon (*0. tshawytscha*), Central Valley steelhead (*O. mykiss*), and North American green sturgeon (*Acipenser medirostris*).
Biological Resources	Wetland function and value of avoided wetland systems should be evaluated with full consideration to watershed fragmentation and impacts to the micro-watershed level. The analysis should include modifications to water and soil chemistry and to the frequency and duration of inundation. Implications of watershed fragmentation to listed invertebrates should also be evaluated. Analyze the ability of avoided wetland systems to function through time considering adjacency of human use and the inability to properly manage avoided areas. Discuss the feasibility of continuing management activities such as controlled burning or regulated livestock grazing as a means to manage and retain full ecological values through time of any wetland areas. Evaluate and discuss the degree to which on-site open space areas will ecologically function and thus serve to perform a long-term conservation benefit.
Biological Resources	The DEIS should include a comprehensive analysis of all species that may be impacted, including Conservancy fairy shrimp (*Branchinecta conservatio*).
Wayne Nastri , U.S. Environmental Protection Agency	
Biological Resources	Based on the understanding that changes in the project proposal and supporting information are not expected in the immediate future, the project as currently proposed, will have a substantial and unacceptable impact on ARNI.
Summer Allen, U.S. Environmental Protection Agency	
Project Description	***Least Environmentally Damaging Practicable Alternative*** The DEIS should include a reasonable range of on-site and off-site project alternatives. The range of alternatives considered in the DEIS must include the LEDPA if a CWA permit is to be granted at the end of the process.

Issue	Comment
Biological Resources	Alternatives information should include a full avoidance (no fill) alternative and alternatives that focus development on the eastern two-thirds of the site and avoid the vernal pools on the western portion of the site consistent with alternatives considered for the PCCP conservation footprint.
Project Description/Alternatives	***Alternatives Analysis*** The DEIS should include a clear description of the basic project purpose and need, project alternatives, potential impacts to the environment, and mitigation for these impacts. Particular attention should focus on an evaluation of the environmental impacts of the proposal and alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options for the decision maker and the public.
Project Description/Alternatives	Temporary and permanent impacts to aquatic resources resulting from each element of the project design should be differentiated and clearly presented. The LEDPA should be identified by comparing the totality of direct, secondary, and cumulative impacts associated with each practicable alternative.
Project Description Biological Resources Hydrology and Water Quality	***Impact Assessment*** The alternatives analysis in the DEIS should estimate, evaluate, and compare direct, secondary, and cumulative impacts for a set of on- and off-site project alternatives. All direct and cumulative impacts associated with the multiple elements of the project design should be addressed, with particular attention paid to the impacts related to downstream and upstream water sources, flooding potential, water quality, and aquatic habitat. The DEIS should include a description of the methods used to estimate temporary and permanent direct impacts, secondary effects (indirect impacts), and cumulative impacts.
Hydrology and Water Quality	***Water Quality and Minimization*** The DEIS should discuss whether or not the applicants are considering the use of LIDS, specifically identify which LIDS will be used and where, and describe how these measures will minimize impacts to water quality resulting from project development.

Issue	Comment
Biological Resources	***Mitigation*** The DEIS should clearly identify suitable compensatory mitigation areas for impacted aquatic resources, both within the project site and in the project vicinity. Information regarding the distribution and extent of waters on the compensatory sites should be included in the DEIS and submitted to the resources agencies. The legal mechanism that will be used to protect the mitigation area into perpetuity should be identified. Long-term management measures for the mitigation areas should be identified to address issues such as invasive species, approved uses, and human disturbances. Mitigation strategies for indirect and cumulative impacts should be identified with appropriate implementing parties.
Air Quality	***Air Quality*** The DEIS should address the feasibility of implementing additional air quality-related mitigation to reduce emissions of diesel particulate matter (DPM) and other pollutants from construction. The DEIS should address the feasibility of a Construction Emissions Mitigation Plan (CEMP). EPA recommends that the following measures be incorporated into the CEMP. Equipment should: • not idle for more than ten minutes; • not be altered to increase engine horsepower; • include particulate traps, oxidation catalysts and other suitable control devices on all construction equipment used at the construction site; • use ultra-low sulfur diesel fuel with sulfur content of 15 parts per million (ppm) or less or other suitable alternative diesel fuel, unless fuel cannot be reasonably procured in the geographic area; • be tuned to the engine manufacturer's specifications in accordance with a defined maintenance schedule. The CEMP should also establish work limitations such as minimizing trips, and providing staging areas for trucks located away from sensitive receptors through appropriate polices and implementation measures.

Issue	Comment
Environmental Justice	***Environmental Justice*** The DEIS should describe the measures taken by the USACE to fully analyze the environmental effects of the proposed Federal action on low-income or minority communities, and present opportunities for affected communities to provide input into the NEPA process. The DEIS should address whether mitigation for localized air impacts was developed in consultation with potentially affected communities.
General	***Incorporation by Reference*** If references to the Environmental Impact Report (EIR) or other documents are used, the DEIS should provide a summary of critical issues, assumptions, and decisions complete enough to stand alone.
Terry Davis, Sierra Club	
Biological Resources	Any section 404 permit must provide vernal pool avoidance and mitigation based on preserving biologically functional vernal pool complexes, not merely wetted areas.
Biological Resources	Vernal pool mitigation must be consistent with species recovery. About 3,000 acres of PVSP is in the Vernal Pool Recovery Plan Core Area for this unit. Recovery guidelines call for the avoidance of 85% of existing resources. Therefore, the DEIS must examine a project alternative that avoids 85% of on-site existing resources.
Biological Resources	The DEIS must examine the cumulative impacts to vernal pool wetland habitat. Based on the amount of urban development proposed for western Placer County, these projects are likely to impact thousands of acres of vernal pool complexes.
Biological Resources	Given the potential cumulative loss of large acreages of vernal pool complexes in western Placer County, and the fact that PVSP could develop roughly 50% of the site while avoiding all the existing vernal pool acreage, the DEIS should examine a project design that would provide 100% avoidance alternative.
Biological Resources	If the proposed project design is to be retained, off-site mitigation must be consistent with the Vernal Pool Recovery Plan. Off-site mitigation should include preserving existing vernal pool complexes at a ratio of 5.6 to 1, consistent with 85% preservation of remaining vernal pool complexes in the recovery unit.

Issue	Comment
Biological Resources	Any acreage provided as off-site mitigation for the loss of vernal pool complexes must be evaluated in light of criteria that have been articulated by the resource agencies and biological consultants in conjunction with the development of the PCCP. Criteria for mitigation property include: • Are parcels contiguous with one another or contiguous with other preserves? • Are they of high quality? (existing vernal pool complexes, degree of disturbance) • What is the shape? (long narrow parcels not generally as desirable as more square) • Internal fragmentation: agriculture/habitat; native/non-native; disturbed/undisturbed. • Type of land between nearest preserve (agricultural, rural subdivisions, urban?) • Ability to manage: What is the degree of incompatibility with adjacent land uses? • Is the parcel in the VP Recovery Plan Core Area?
Biological Resources	Off-site mitigation through the creation of vernal pools should not be acceptable. The creation of vernal pool complexes is unproven in terms of biological function. Also the creation of additional vernal pools in existing vernal pool complexes is also unproven biologically.
Biological Resources	Additional biological surveys are needed. The PVSP Final EIR indicates that complete surveys have not been done. The recent discovery in Placer County of Conservancy fairy shrimp, federally listed as endangered, makes exhaustive surveys absolutely necessary. The Recovery Plan for the species calls for 100% avoidance of take.
Carol Witham, California Native Plant Society	
Biological Resources	This level of loss of wetlands and waters of the U.S. on the project site is unacceptable from an endangered species recovery perspective.
Biological Resources	The project, as proposed, does not appear to meet the LEDPA test required by the Guidelines. A thorough range of viable alternatives should be analyzed including those that would provide either on-site avoidance of waters/wetlands and/or off-site mitigation at ratios appropriate to meet the goals of the Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon.
Biological Resources	The proposed Conceptual Conservation Strategy and an appropriate range of alternatives to it must be analyzed in the EIS. All environmental impacts of the proposed Conceptual Conservation Strategy must be assessed and analyzed concurrently with the proposed project in order to fully disclose the full scope of the proposed action.

Issue	Comment
Biological Resources	The rare plant surveys conducted appear to be entirely inadequate. Many annual vernal pool plant species have not been evident or have occurred in extremely low numbers, even in documented locations, for the past couple of years because of unusual weather patterns. Additional surveys for these species must be conducted in order to properly assess impacts to listed and special-status biota.
Kim Delfino, Defenders of Wildlife	
Biological Resources	**Recovery Standard Must be Satisfied** The Recovery Criteria identified in the Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon should be rigorously complied with. The USACE must ensure that the terms of the Section 404 permit, if granted, assures that the proposed project must protect the applicable percentages of vernal pool habitat and species occurrences as identified by the recovery plan.
Biological Resources	The project, as proposed, does not come close to meeting the recovery plan criteria for any of the listed vernal pool species. The proposed project should protect 85% of vernal pool grasslands.
Biological Resources	**Environmental Surveys Must be Conducted** The environmental surveys conducted have been sporadic and mostly conducted during winter, with very few spring surveys. In particular, additional surveys are required since the discovery of the Conservancy fairy shrimp. Additional spring surveys of vernal pool grasslands should be required.
Project Description	**Avoidance and Minimization of Impacts** The USACE should analyze project alternatives in which the project design leaves the landscape largely unfragmented. Where fragmentation occurs, impacts should be minimized by avoiding leaving blocks of "protected" areas with long edges.
Biological Resources	**Mitigation** There are three major concerns with the proposed mitigation for this project, amount of mitigation, kind of mitigation, and creation of vernal pools for mitigation. Currently the project does not protect enough of the vernal pool grasslands. The USACE should require mitigation that is both equal in kind and amount of area lost. In addition, the Service is moving away from the artificial creation of vernal pools since there is no evidence that artificial pools retain their vernal pool plants over a long period of time.

Issue	Comment
Esther McCoy, Landowner	
General	How can any request be approved that will subsequently dump dredged or fill material into such a large body of water? Is this by any chance Dry Creek that flows south into Rio Linda from the North?
Hydrology and Water Quality	If this 102.7 acres is an active flowing creek, could dredged or fill material possibly raise the water level to such an extent that flooding could be expected in Rio Linda during raining seasons?
General	The dredged or fill material could be taken to a landfill to create a small "Trashmore Mountain" for a public park.

General Permit XX

Placer Vineyards Specific Plan Infrastructure
Placer County, California

EFFECTIVE DATE: <<DATE>>

EXPIRATION DATE: <<DATE>>

ISSUING OFFICE: U.S. Army Corps of Engineers, Sacramento District

ACTION ID: SPK-1999-00737

PURPOSE: The purpose of the RGP is to provide a simple and expeditious means of providing Section 404 authorization for the construction of certain backbone infrastructure within the Placer Vineyards Specific Plan (PVSP). The PVSP required backbone infrastructure is described on Exhibit A, attached hereto (the "backbone infrastructure"). The backbone infrastructure is expected to be built in phases over thirty years as development proceeds under the PVSP. It is comprised of improvements to existing roadways and intersections, proposed routes for new major roadways, portions of pedestrian/bicycle trails, water transmission lines and storage tanks (both potable and recycled), stormwater management and conveyance systems, and sewer trunk lines, force mains, and lift stations. Because the PVSP includes approximately 27 separately-owned properties upon which independent development projects may be constructed in accordance with individual permits that may be issued by the Corps (22 of which have individual permit applications pending before the Corps), and it is not presently known which of these applicants will be designated to construct which segment or phase of the backbone infrastructure, this RGP will allow any such designated applicant to secure Section 404 permit coverage for that segment or phase of the backbone infrastructure he or she is required to construct. This RGP will ensure that (i) construction occurs in a coordinated manner; (ii) impacts to aquatic resources will be mitigated to the Corps' standards; and (iii) no more than minimal cumulative impacts will occur as a result of such activities.

LOCATION: This RGP is restricted to the PVSP project area, plus those areas in which an out-of-plan area component of the backbone infrastructure will be constructed. The 5,230-acre PVSP is located in the southwestern portion of unincorporated Placer County, approximately 15 miles (24 kilometers) north of Sacramento, and southwest of the City of Roseville (see Figure 1).

AUTHORITY: This RGP authorizes activities within the PVSP project area incidental to construction of the backbone infrastructure that involve discharges of dredged or fill material into waters of the U.S. under Section 404 of the Clean Water Act.

ACTIVITIES AUTHORIZED BY THIS REGIONAL GENERAL PERMIT: This RGP authorizes specific structures and work identified as elements of the backbone infrastructure associated with the

PVSP project. This RGP does not authorize any work other than that identified as a component of the backbone infrastructure and does not authorize any changes in the scope or nature of that backbone infrastructure. The structures and work authorized by this RGP are shown on the attached drawings.

TERMS OF AUTHORIZATION:

1. Applying for RGP Authorization: Prior to commencing work on a proposed segment of backbone infrastructure requiring authorization by the RGP, applicants seeking such authorization shall notify the Corps in accordance with RGP general condition number 14 (Notification). If the Corps determines that the work does comply with the terms and conditions of the RGP, the Corps will notify the applicant of such within 45 days of receipt of a complete application.

   If the work would involve potential impacts to federally-listed branchiopods, upon receiving a complete notification the Corps will request the USFWS to append the work to the programmatic biological opinion. In such cases, authorization under this RGP will not be granted by the Corps until the USFWS has appended the infrastructure segment(s) to the programmatic biological opinion.

2. Impact Limitations for Waters of the U.S.: The impacts to waters of the U.S. resulting from construction of each segment of backbone infrastructure shall not exceed the impacts authorized for said infrastructure segments in each of the individual permits issued for the PVSP project.

3. After-the-fact Projects: This RGP may not be used to authorize activities that were constructed without the required authorization of a Department of the Army permit.

4. Special Conditions: The Corps may add special conditions to an authorization to ensure the activity complies with the terms and conditions of the RGP, and/or that adverse impacts on the aquatic environment or other aspects of the public interest are individually and cumulatively minimal.

5. Activity Completion: Any activity authorized by the Corps under the RGP must be completed within three (3) years of the date it is authorized. The "authorization date" is the date the Corps verifies in writing that the activity meets the terms and conditions of the RGP. The Corps will, on a case-by-case basis, review requests for time extensions if the permittee fails to complete the activity within three years. A time extension would be considered a reverification and would be subject to review and approval policies in effect at the time of review.

6. Discretionary Authority: The Corps has the discretion to suspend, modify, or revoke authorizations under this RGP. This discretionary authority may be used by the Corps to also further condition or restrict the applicability of the RGP for cases in which it has concerns associated with the Clean Water Act Section 404(b)(1) Guidelines, or regarding any public interest factor. Should the Corps determine that a proposed activity may have more than minimal individual or cumulative adverse impacts to aquatic resources or otherwise be contrary to the public interest, the Corps will modify the authorization to reduce or eliminate those

adverse effects, or notify the applicant that the proposed activity is not authorized by the RGP and provide instructions on how to seek authorization under an individual permit. The Corps may restore authorization under the RGP at any time it determines that the reason for asserting discretionary authority has been resolved or satisfied by a condition, project modification, or new information. The Corps may also use its discretionary authority to modify, suspend, or revoke this RGP at any time.

7. Expiration of RGP. This RGP is valid for five (5) years from the date of issuance (or reissuance). At least sixty (60) calendar days prior to the expiration date of this RGP, the Corps will issue a public notice with an opportunity for public comment, describing the reasons for reissuing the RGP, reissuing the RGP with modifications, or not reissuing the RGP for another five years. The Corps may extend the RGP for six months beyond the expiration date if it is unable to reissue the RGP due to unresolved issues. If the Corps has not reissued or extended the RGP by the expiration date, the RGP will no longer be valid. This RGP, or any specific authorizations granted under this RGP, may also be modified, suspended or revoked by the Corps at any time deemed necessary. In such instance, the Corps will issue a public notice concerning the action.

GENERAL CONDITIONS:

The following conditions apply to all work authorized by this RGP.

1. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must suspend work within 100 feet of any discovered resource(s) and immediately notify this office of what you have found. The Corps will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity or sell the property associated with this permit. You may make a good faith transfer to a third party. If you sell the property associated with this permit, you must obtain the signature and mailing address of the new owner in the space provided and forward a copy of the permit to the Corps to validate the transfer of this authorization. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. Fill material must be clean and free of contaminants and noxious plants. Fresh cement or concrete is not allowed in waters unless it is placed in sealed forms. Unsuitable fill material includes, but is not limited to, vehicle bodies, farm machinery, appliances and other metal objects, asphalt, biodegradable construction debris and tires, concrete with exposed rebar.

4. No activity is authorized under this RGP if the activity is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for listing under the ESA,

or which will destroy or adversely modify critical habitat of such species, unless such impacts to critical habitat have been authorized by the USFWS. The attached USFWS programmatic biological opinion (BO) No. _____ dated _____ contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with the incidental take authorization for this RGP. Authorization under this RGP is conditional upon your compliance with all the mandatory terms and conditions associated with the incidental take statement included in the attached BO, which terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with the incidental take statement in the BO, where take of a listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with this RGP. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its BO, and with the ESA. The permittee must comply with all conditions of this BO, including those ascribed to the Corps.

5. All activities authorized under this RGP shall be conducted in compliance with that certain Programmatic Agreement between the Corps, the California Office of Historic Preservation and the Advisory Council on Historic Preservation regarding the Placer Vineyards Specific Plan Project, dated _____, 201X. In addition, pursuant to Section 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

6. Section 401 water quality certification is required for all activities to be authorized by this RGP. The Central Valley Regional Water Quality Control Board (CVRWQCB) has issued a programmatic water quality certification for the activities authorized by this RGP. Each permittee must submit a notice of intent (NOI) to the CVRWQCB and receive its approval to construct the infrastructure under the programmatic water quality certification prior to beginning work in waters of the United States authorized by this RGP.

7. Best Management Practices (BMPs) must be employed during construction and in project design to protect water quality and minimize impacts of stormwater runoff on aquatic resources. BMPs should be appropriately located in or adjacent to waters of the U.S. (e.g., siltcurtains). The applicant shall employ the following BMPs, as appropriate and feasible, in designing and constructing the project.

    a. Minimization of new impervious surfaces in project design (through practices such as reducing road widths);
    b. Structural measures that provide water quality and quantity control, such as vegetated natural buffers, grassed swales, infiltration trenches, level spreaders and channel grade controls;
    c. Structural measures that provide quantity control and conveyance;
    d. Construction BMPs such as matting and filter fencing, or other barrier methods to intercept/capture sediment;
    e. Low impact development (LID) BMPs.

8. No activity may substantially disrupt the necessary life cycle movement of aquatic species indigenous to the water body, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water.

9. Road crossings shall be designed to maintain the pre-construction bankfull width of the stream and ensure fish passage, as well as accommodate reasonably foreseeable wildlife passage and expected high flows. This shall be accomplished by:

    a. Employing bridge designs that span the stream or river;
    b. Utilizing pier or pile supported structures, and/or;
    c. Utilizing large bottomless culverts with a natural streambed, where the substrate and streamflow conditions approximate existing channel conditions.

10. Work occurring within waters of the U.S., including wetlands, must utilize equipment with a ground bearing weight of 5 pounds per square inch or less or must work from mats or foundation pads.

11. Utility lines shall not adversely alter existing hydrology, including the draining of wetlands. In wetland areas, structures such as cut-off walls shall be used within utility trenches to ensure that the trench through which the utility line is installed does not drain waters of the U.S. Clay blocks, bentonite or other suitable material shall be used to seal the trench to prevent the utility line from draining waters of the U.S., including wetlands.

12. Temporary fills shall be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas shall be re-vegetated with native and/or naturalized species common in the adjacent grasslands upon completion of the work.

13. Mitigation for impacts to waters of the U.S. must be accomplished as follows:

    a. Where the mitigation involves the purchase of credits from an approved mitigation bank or in-lieu fee program, the number and type of credits required by the Corps' authorization must be purchased and proof of purchase provided to the Corps prior to commencing the activity authorized by the RGP.
    b. If the permittee elects to use permittee-sponsored mitigation, the mitigation and monitoring plan for the permittee-sponsored mitigation must be prepared, submitted to, and approved by the Corps prior to receiving authorization under this RGP, and construction of the compensatory mitigation must begin concurrently with or in advance of construction of the infrastructure segment(s) authorized by this RGP and must be completed within 90 days.

14. The applicant shall provide written notification requesting authorization under this RGP prior to commencing work. The Corps' receipt of the complete notification is the date when the Corps receives all required notification information from the applicant (listed below). Written notification shall include all of the following:

a. A letter signed by the applicant requesting authorization under the RGP including the specific segment(s) of backbone infrastructure to be constructed and the area (in square feet and acres) of waters of the U.S. that will be impacted.
b. The estimated start and completion date for the infrastructure segments to be constructed.
c. A vicinity map showing the infrastructure segments to be constructed in relation to the overall PVSP project and a plan drawing(s) showing the infrastructure segment(s) relative to existing waters of the U.S. Where the infrastructure would involve a crossing of waters of the U.S., the applicant will also include a cross-section drawing depicting the crossing relative to existing waters of the U.S.
d. A tabulation of the direct and indirect effects (both permanent and temporary) associated with the infrastructure segment(s).
e. A compensatory mitigation proposal. If the applicant proposes permittee-responsible mitigation, the notification will need to include a draft mitigation and monitoring plan in accordance with the current Sacramento District or South Pacific Division Mitigation and Monitoring Guidelines. If the applicant proposes to purchase credits from a Corps approved mitigation bank or in-lieu fee program, the notification shall identify the proposed bank, and type and number of credits.
f. A narrative discussion of the BMPs utilized to minimize impacts to waters of the U.S.

15. The permittee must submit a report to the Corps within 30 days of completion of the work authorized by this RGP. The completion report will contain the following:

    a. The Department of the Army permit number.
    b. A plan view drawing of the location of the authorized work footprint (as shown on the permit drawings) with an overlay of the work as constructed in the same scale as the attached permit drawings. The drawing should show all "earth disturbance," wetland impacts, structures, and the boundaries of any on-site and/or off-site mitigation or avoidance areas. The drawings shall contain, at a minimum, 1-foot topographic contours of the entire site.
    c. Ground and aerial photographs of the completed work. The cameral positions and view-angles of the ground photographs shall be identified on a map, aerial photograph, or project drawing.
    d. A description and list of all deviations between the work as authorized by this permit and the work as constructed. Clearly indicate on the as-built drawings the location of any deviations that have been listed.

16. The permittee must allow representatives from the Corps to inspect the authorized activity and any compensatory mitigation areas at any time deemed necessary to ensure that the work is being or has been accomplished in accordance with the terms and conditions of this RGP.

17. The permittee is responsible for all work authorized by this RGP and ensuring that all contractors and workers are made aware and adhere to the terms and conditions of the Corps' authorization. The permittee shall ensure that a copy of the RGP, authorization and associated drawings are available for quick reference at the project site until all construction activities are completed.

18. The permitttee shall employ a wetland scientist to continuously monitor construction activities in the vicinity of waters of the U.S. to ensure against unauthorized activity during construction. The monitor shall be on-site during all construction activities within 100-feet of preserved or avoided waters of the U.S., and for all work within preserve areas. If unauthorized impacts occur, the biological monitor shall immediately stop work and notify the Corps.

LIMITATIONS AND RESTRICTIONS:

1. The Corps has authority to determine if an activity complies with the terms and conditions of the RGP.

2. This RGP does not obviate the need to obtain other Federal, state, or local permits, approvals, or authorizations required by law.

3. This RGP does not grant any property rights or exclusive privileges.

4. This RGP does not authorize any injury to the property or rights of others.

5. This RGP does not authorize interference with any existing or proposed Federal project.

CONTACTS AND ADDITIONAL INFORMATION:
For additional information, about RGP XX, please contact the U.S. Army Corps of Engineers, Sacramento District at the address below, phone number (916) 557-5250.

ATTACHMENTS:

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

_____ _____

Michael S. Jewell Date
Chief, Regulatory Division
Sacramento District

Exhibit A – PVSP Backbone Infrastructure

Included in this permit application are improvements to existing roadways and intersections, proposed routes for new major roadways, portions of pedestrian/bicycle trails, water transmission lines and storage tanks (both potable and recycled), stormwater management and conveyance systems, and sewer trunk lines, force mains, and lift stations. These improvements are illustrated on Figures 2a and 2b. It is assumed that, where feasible, utility lines will be placed within existing roadways or other disturbed areas, so as to minimize environmental impacts. In some instances, though, the facilities may have to be placed outside existing roads and thus could disturb unpaved areas.

With respect to all of the infrastructure elements, the area to be disturbed (as well as adjacent areas, where appropriate) will be fully analyzed for impacts to biological, cultural, and other resources. In order to assess wetland impacts, where infrastructure elements are to be located on participating properties within the Plan Area, wetland delineations have been utilized. Regarding infrastructure elements that are to be constructed outside of participating properties (where rights-of-entry have not yet been secured), wetland mapping has been conducted from review and interpretation of available aerial photography. It is anticipated that prior to permit issuance, wetland delineation and verification will be completed. A composite map depicting all wetlands within areas that may be impacted is provided as Figures 3a and 3b. Smaller scale exhibits (i.e., 1"= 300') are provided as appendices (A-E) to this application.

Regarding assessment of wetland impacts associated with infrastructure improvements, any wetland that might also be considered habitat for federally-listed aquatic invertebrates (i.e., vernal pools, isolated seasonal wetlands, seasonal wetland swales, and drainage swales) that would experience any impact under the development scenario, has been considered to be completely impacted (i.e., the entire area has been counted as impacted). Where such wetlands are large enough that they extend more than 250 feet from the estimated point of direct impact, only that portion within 250 feet has been considered as directly impacted or "filled." For wetland types that are not considered to be habitat for federally-listed aquatic invertebrates (e.g., perennial marsh, seasonal marsh, intermittent drainage, ephemeral drainage), no additional area (beyond the anticipated area of disturbance) has been included in the area estimates.

There are two options with respect to sewerage for the western portion of the Plan Area (i.e., Sacramento Regional Sewer or Dry Creek Wastewater Treatment Plant). In addition, there are two options with respect to secondary water supply (i.e., Placer County Water Agency connection at PFE and Cook Riolo Road or Placer County Water Agency connection at Antelope Road and Walerga Road). Finally, there are two different impact scenarios resulting from the three alternatives for reaching the Dry Creek Wastewater Treatment Plant from PFE Road. Because of these options, six different impact scenarios are possible. Each is described below, and illustrated in Figures 6a-6f, respectively (below). The most likely impact scenario (impact scenario 3) has been incorporated into this application, and the impact estimate reported in Block 22 of the application form.

Roads and Trails

The transportation improvements covered in this permit application provide for a full range of transportation modes, allowing for the safe and efficient movement of people and goods throughout the Specific Plan area. The circulation network is designed to accommodate the

Figure 2A - Infrastructure Map 1
Figure 2b - Infrastructure Map 2
Figure 3a - Wetland Map 1
Figure 3b - Wetland Map 2

expected Specific Plan area traffic and to provide logical connections and extensions of pedestrian, bikeway and transit facilities.

Roads

Please refer to Figures 2a and 2b for illustrations of the improvements discussed below. Baseline Road (existing) parallels and describes the entire northern boundary of the Specific Plan area. In order to provide for increased traffic flows, initially, Placer County requires that the existing two-lane road be widened to provide for two eastbound and two westbound lanes (and ultimately 3 lanes in each direction). The ultimate widening is anticipated in this application. Between Walerga Road and Brewer Road, the initial widening will be accomplished on the south side of the existing roadway (within the Specific Plan Area), but in order to avoid impacts to existing rural residential housing, between Brewer Road and East Natomas Road, the road will be widened on both sides. (Just west of the Specific Plan area, Baseline Road enters Sutter County and its name changes to Riego Road.) Required Baseline/Riego Road improvements also include seven (7) intersections, at:

A. Riego Road and East Natomas Road (located in Sutter County)

B. Riego Road and Pleasant Grove Road (northbound, located in Sutter County)

C. Baseline Road and Pleasant Grove Road (southbound, located in Placer and Sutter Counties)

D. Baseline Road and Elder Street (southbound, located in Placer County)

E. Baseline Road and Locust Road (located in Placer and Sutter Counties)

F. Baseline Road and Newton Road (southbound, located in Placer County)

G. Baseline Road and Brewer Road (located in Placer County)

Watt Avenue (existing) runs north-south through the eastern portion of the Specific Plan area. In order to provide for increased traffic flows, Placer County requires that the existing two-lane road be widened to provide for two northbound and two southbound lanes (and ultimately 3 lanes in each direction). This initial widening is to extend from Baseline Road (at the northern boundary of the Specific Plan area) southward to the Specific Plan area boundary at Dry Creek, then approximately 2500 feet more, terminating in Sacramento County near the intersection of Watt Avenue and Pepperidge Drive. The ultimate widening is anticipated in this application. The road widening will be accomplished on both sides of the existing pavement for approximately 2100 feet south from Baseline

Road. At that point, the alignment will be shifted westward in order to minimize impacts to existing rural residential housing. The existing crossing of Watt Avenue over Dry Creek will also require improvement. The existing Watt Avenue bridge will be removed and replaced by a new structure (or structures) which would carry three lanes northbound and three lanes southbound. It is anticipated that a bridge (or bridges) utilizing in-stream concrete pilings would be required to effect this improvement. At present, bridge design has not been completed. For the purposes of this application, we are assuming that the entire footprint depicted within jurisdictional waters would be directly impacted (i.e, 0.328 acres). South of Dry Creek, the alignment will shift back toward the east so that the required road widening will be accomplished on both sides of the existing road.

Several major roadways are important to traffic circulation within and throughout the Specific Plan area, and thus, are considered common infrastructure elements. These are Dyer Lane, 16th Street, and 18th Avenue, Locust Road, and Palladay Road. Existing Dyer Lane (a two-lane roadway) would be widened to four lanes and would extend toward the west from its existing intersection with Watt Avenue. Along that extension, in order to minimize impacts to heritage oak trees lining the existing roadway, the alignment will be shifted at key locations. For the first approximately 1500 feet, widening would be accomplished on the north side, then the alignment would be shifted to the south (so that widening would occur on the side of the existing roadway). This alignment would be extended due west for approximately 3150 feet. New pavement would be extended due west from the point where existing Dyer Lane intersects Tanwood Road (approximately 0.9 miles west of the intersection of Dyer Lane with Watt Avenue). At that point, the alignment would be shifted to the north again, and extended for approximately 1.36 miles. Further to the west, where Dyer would enter Ownership Unit No. 19, it would begin a broad-radius curve to eventually run north-south, and terminate at a new intersection with Baseline Road. Dyer Lane (new pavement) would also be extended approximately 500 feet to the east from its intersection with Watt Avenue.

Sixteenth Street would be a four-lane, north-south linkage between Dyer Lane and Baseline Road located between Ownership Unit Nos. 12A and 12B to the east, and Ownership Units 13 and 15 to the west. 18th Avenue would be a new a two-lane wide spur extending west from Dyer Lane, across Ownership Unit No. 19 to intersect with the existing Locust Road. The shoulders of Locust Road (existing) are proposed to be improved on both sides. In order to provide appropriate access to/from a fire station to be located in the eastern portion of Ownership Unit No. 19, a new road is proposed to be constructed between Palladay Road and West Dyer Lane (east-west, across Ownership Unit No. 19).

Pedestrian/Bicycle Trails

A multi-use trail system will provide pedestrian and bicycle linkage throughout the plan area. Typically, these are 8-12 foot wide paved trails. For the purposes of this infrastructure application, only those trails occurring within open space areas use and which would result in impacts to “waters” have been incorporated into the request for authorization. Wetland and other “waters” impacts accruing to trails within lotting plans areas have been assigned to those applications.

Potable Water Supply

Please refer to Figures 2a and 2b for illustrations of the improvements discussed below. The Specific Plan area is within the service area of the Placer County Water Agency (PCWA). PCWA has determined that it has sufficient water rights to meet the projected demand of projects likely to develop

in western Placer County through 2030, including the proposed Placer Vineyards Specific Plan. The Specific Plan area is proposed to receive water service from various sources on an initial and long term basis. Some of these are included in this infrastructure permit application. Development of new infrastructure to use these water supplies will be necessary. The long-term water supply would be drawn from the Sacramento River at a new multi-party pump station, treatment plant, and transmission pipeline.

The initial water supply under this application will be implemented with surface water from the American River. It consists of water from PCWA's unused American River water supply, diverted at PCWA's new permanent American River Pump Station, conveyed and treated at the existing Foothill Water Treatment Plant, and delivered through PCWA's existing transmission pipeline system to the vicinity of Industrial Avenue. A booster pump and storage tank currently under construction would allow PCWA to introduce its water into the City of Roseville pipeline system. Under an existing agreement with the City of Roseville, PCWA can convey water through the City's pipeline system to a location near Baseline Road and Fiddyment Road. Extensions of this pipeline westerly in Baseline Road would deliver an initial water supply to Placer Vineyards. The on-site distribution system would be made up of a transmission main located in Baseline Road that would provide water to the entire Specific Plan area. A grid of 12-inch and 16-inch mains located alongside the arterial and collector road system would be connected to the transmission line in Baseline Road and distribute water to the developments within the Specific Plan area. A total of 15-20 million gallons of storage would be provided by five water storage reservoirs and booster pump station sites, located throughout the Specific Plan area at the following locations:

1. East of Watt Avenue, within Ownership Unit Nos. 1B and 3,

2. South of Baseline Road, within Ownership Unit Nos. 4 and 7,

3. South of West Dyer Lane, within Ownership Unit No. 9,

4. West of Palladay Road, within Ownership Unit No. 19, and

5. West of Palladay Road, within Ownership Unit No. 19.

It is anticipated that water storage facilities would be composed of above-ground concrete or steel tanks with a capacity of approximately three to five million gallons of storage at each location. The tanks would be circular and would be either 130 feet in diameter and 30 feet in height, or 150 feet in diameter and 24 feet in height. Four (4) of the planned water storage tanks are adjacent to infrastructure roadways, and the supply lines leading to those tanks would be installed at the same time as the road improvements. Thus, the majority of the impacts accruing to the potable water transmission network would be limited to the footprints of the five storage tank sites and the stub lines necessary to connect them to the transmission lines within the plan area roadways. The supply line leading to Tank No. 1 (see list above) would require overland installation from Baseline Road south within the alignment of a future roadway that would be subject to permitting by the involved individual property owners involved. The impacts associated with the water line installation (only) are requested in this application.

Options for Secondary Potable Water Supply

A secondary water supply could be made available if the Sacramento River project has not begun delivery of water when the initial supply, as described above, has been fully utilized. It consists of use of a portion (6000 acre feet per year [AFA] of the 29,000 acre-feet of PCWA Middle Fork American River water currently contracted to Sacramento Suburban Water District (SSWD, formerly Northridge Water District). The supply would be diverted from Folsom Lake, treated at Sidney N. Peterson Water Treatment Plant (owned and operated by the San Juan Water District), and conveyed to the Specific Plan area via existing pipelines.

In this case, potable water could be supplied to the plan area by connecting to an existing cooperative transmission pipeline at the intersection of PFE Road and Cook-Riolo Road (i.e., Option "A"). This water line (network) would then extend from Cook-Riolo Road westward within PFE Road to its intersection with Watt Avenue, then northward within Watt Avenue to five (5) points within the Specific Plan area. This water line would be installed at the same time that a forced main sewer trunk would be constructed within the pavement of PFE Road (see discussion below). Installation of this water line is anticipated to have no impacts over and above those that would be experienced with the installation of the sewer line.

Alternatively, the secondary potable water supply may come from the San Juan/Sacramento Suburban cooperative transmission pipeline that currently terminates near the intersection of Antelope Road and Walerga Road (i.e., Option "B"). In this case, a new transmission line would be constructed (within the pavement) from that point westward along Antelope Road to, and then north within, Watt Avenue to those same points within the plan area (i.e., at the potable water storage tanks). Road improvements to Watt Avenue are anticipated to extend southward into Sacramento County to approximately the intersection of Watt Avenue and Pepperidge Drive, thus impacts of the water transmission network unique to this alternative would include those impacts potentially experienced between that intersection and the terminus of the existing San Juan/Sacramento Suburban cooperative transmission line near the intersection of Antelope Road and Walerga Road.

Recycled Water Supply

Please refer to Figures 2a and 2b for illustrations of the improvements discussed below. The project proposes to provide recycled water to the Plan Area for use in parks, schools, publicly landscaped areas, and the landscaping associated with commercial, business, and professional and uses. The use of recycled water offsets potable water demand and is an important component of the overall water supply strategy. This would be supplied from the Dry Creek Wastewater Treatment Plant, and eventually from the Pleasant Grove Wastewater Treatment Plant. Initially, a connection will be made to an existing 24-inch gravity recycled water line constructed as part of the Dry Creek West Placer Community Facilities District #1. The pipeline currently terminates south of Dry Creek on the east side of Walerga Road. The line will be extended in a northerly direction along (and within the pavement of) Walerga Road to Baseline Road, where it will be turned west (within the pavement and/or landscape corridor) to the project site. From Baseline Road, the line will be extended south within Watt Avenue, then west within Dyer Lane to the site of the recycled water storage tank on the south side of Dyer Lane within Ownership Unit No. 17. Impacts associated with this element of the infrastructure are anticipated to include only those potential impacts resulting from the footprint of the storage tank site and the stub line necessary to connect it to the transmission line within Dyer Lane.

Sanitary Sewer

Please refer to Figures 2a and 2b for illustrations of the improvements discussed below. There are two options for long-term strategies with respect to providing sewer service to the entire Plan Area. They involve using a planned connection to the Sacramento Regional Wastewater Treatment Plant (SRWWTP) or the Dry Creek Wastewater Treatment Plant (DCWWTP). Under either option, the easternmost 890 acres of the Specific Plan area would be serviced by the DCWWTP because the area is already included in the 1996 Roseville Regional Wastewater Treatment Service Area Sewer Master Plan. The required conveyance facilities have been partially constructed with the first phase of the Dry Creek/Western Placer Community Facilities District (CDF) project. A pump station and force main near Walerga Road and north of PFE Road have been designed to accept wastewater from the Specific Plan area for conveyance to the DCWWTP. This would be accomplished by using a utility corridor to connect to the DCWWTP that extends from the eastern portion of the Specific Plan area southerly across Dry Creek, then along the south side of Dry Creek to an existing sewer force main east of Walerga Road. This alignment would overland approximately 0.75 miles south from its point of origin to Dry Creek, where "bore and jack" technology would be used to implement the required crossing (thus avoiding impacts), then west and south (paralleling Dry Creek) approximately 3000 feet to a proposed lift station. From that lift station, a new forced main would convey wastewater approximately 10,125 feet (1.9 miles, paralleling Dry Creek) to a point where it would intersect an existing forced main approximately 1400 feet east of Walerga Road.

Options for Sewer Service

The western portion of the Specific Plan area could be sewered at the Sacramento Regional Sanitation District south of Sacramento (i.e., Option "A"). Under this option, in order to transport wastewater to this location, the applicants would construct a gravity trunk sewer line from the western portion of the Specific Plan area (beginning at a point on Ownership Unit No. 19). The alignment would be directed south within the pavement of Locust Road (and then Elwyn Avenue) approximately 9850 feet (1.9 miles) to the intersection of Elwyn Avenue and Elverta Road, where it would turn west and proceed within the pavement of Elverta Road approximately 2440 feet to its intersection with El Rio Avenue. The majority of the approximately 3300 foot-long north-south segment between Elverta Road and "U" Street would be overland, then the line would be placed within the pavement of West 6th Street, extending another 7690 feet southward to its intersection with Elkhorn Boulevard where it would join a segment of the Upper Northwest Interceptor.

Another option (i.e., Option "B") for long-term sewer service is to connect the entire Specific Plan area to the Dry Creek Wastewater Treatment Plant (DCWWTP), which is owned and operated by the City of Roseville on behalf of the Joint Powers Authority (JPA) (known as the South Placer Wastewater Authority) consisting of Placer County, the City of Roseville, and South Placer Municipal Utility District. The amount of capacity available at this facility has been the subject of a recent analysis by the City of Roseville. If the DCWWTP is utilized by the entire Specific Plan area, the conveyance system to deliver wastewater to the DCWWTP would include construction of a gravity system delivering wastewater to the western end of the Specific Plan area, a lift station with adequate emergency storage, and a force main to pump wastewater back easterly to the DCWWTP. The sewer connection corridor would extend from the lift station to be situated near the west end of the Specific Plan area (on Ownership Unit No. 19) northward approximately 200 feet overland, then easterly approximately 3950 feet overland to the new proposed alignment of West Dyer Lane. At this point the

forced main sewer line would be placed within the pavement of West Dyer Lane and proceed east to Watt Avenue, then south within Watt Avenue. The required crossing of Dry Creek would be implemented using "bore and jack" technology to avoid impacts, and the line would then proceed easterly along the alignment of PFE Road and northerly to the plant by way of one of three alternative alignments. The primary proposed alignment (A) would proceed northerly to the plant at Hilltop Circle, just east of the City of Roseville Corporation Yard. An alternative alignment (B) would be approximately 375 feet to the east, at the eastern boundary of the Corporation Yard. A third alternative (C) would leave PFE Road northerly at Cook Riolo Road, turning easterly to the DCWWTP just north of Dry Creek. Under any of these three scenarios, the required crossing of Dry Creek to reach the treatment plant on the north bank would be accomplished using "bore and jack" technology in order to avoid impacts.

Drainage, Flood Control and the On-Site Avoidance/Open Space System

Please refer to Figures 2a and 2b for illustrations of the improvements discussed below. The Specific Plan includes a system for the management of stormwater runoff, and establishes guidelines for management of urban runoff and the control of erosion and sedimentation through the design of drainage systems and land use regulations. The specific plan minimizes potential water quality impacts by preserving drainageways in existing locations and establishing detention basins to contain and filter storm water runoff. Open space area estimates herein are approximate, based upon visual estimations of length and "average" corridor width.

The onsite project drainage would be designed to provide water quality treatment of runoff from paved and other developed areas prior to release into the swales and streams. This treatment will consist of the following:

1. Directing some of the flow to sheet discharge onto grassy areas or open space.

2. The installations of "Fossil Filter" or equivalent petroleum absorbing insert assemblies in the project drop inlets.

3. The placement of water quality interceptor devices.

4. The placement of water quality sediment basins within detention facilities and channels.

5. Use of rock-lined ditches below pipe outlets.

The Specific Plan area is within three major drainage sheds: Curry Creek, Dry Creek, and the Upper Natomas East Main Drainage Canal (NEMDC), now known as Steelhead Creek. According to the Specific Plan and the Master Project Drainage Study, the drainage system has been designed to accommodate peak flow rates resulting from additional impervious surfaces and proposed drainage modifications. Development of the project will require additional attenuation at several locations, including within the existing floodplain and flood control channels upstream of proposed culvert facilities. Detention basins and water quality treatment basins will be provided to optimize water quality. Pending final design, and where appropriate opportunities are identified within constructed and/or enhanced drainageways, wetlands may be constructed to increase biological function. Where appropriate, riparian plantings may be used to augment these habitats. Additionally, flood control

facilities will preserve areas where sensitive resources exist, such as wetlands. The Drainage Study includes provisions to maintain the hydrology of sensitive areas by preserving the mean annual and peak flow rates through them.

In order to preserve the integrity of the avoidance areas within the Plan Area, it will be necessary that Plan Area development not adversely impact mean annual and peak annual type events. Meaning, increases in flow rates for these events should not be allowed within the unaltered swales. Additionally, where seasonal wetlands are identified, nuisance waters from non-storm discharges will need to be diverted to the flood control facilities so as to not affect the seasonal nature of the existing features.

In order to accomplish the above criteria, special structures will need to be used in the drainage system to divert excess floodwaters to the flood control channels, or to divert nuisance waters away from the existing swales. In any case, project drainage will be treated for water quality prior to discharge to an existing or proposed flood control channel. Initial design concepts of the structures are shown in Figures 4a and 4b.

Based on the hydraulic function of the proposed project improvements, the following generalizations may be used in preliminary design of the systems:

- Based upon preliminary design work, when the difference in elevation between the existing wetland invert and the surface elevation of the future streets is less than 7 feet, pumping or a design standard modification may be necessary to maintain mean annual flow rates. The design standard modification relates to the Placer County standard which does not permit pressure flow in the 10-year design event. When the difference is less than roughly 7 feet, in order to prevent submergence of the storm drainage system in the 10-year event it would need to be constructed so shallow it would conflict with other utilities, and minimum pipe slopes cannot be obtained. Minimum pipe slopes must be maintained, and conflicts with other utilities must be avoided. As a result, in some cases the storm drain will be constructed to a depth where flows cannot gravity to the wetland areas directly, and pumps may be necessary. In other cases, where the storm drain minimum slopes can be maintained, it may be necessary to request a design standard exception to permit a portion of the trunk storm drainage system, upstream of the diversion structure, to flow under pressure in the 10-year event.

- The gate or stop log system between the wetland discharge and the stormwater quality discharge should be removable to permit maintenance flushing of sediment out of the system. Also, it may be possible to design this gate on a float system, to permit flood event flows (in excess of mean annual) to pass directly through to the next chamber, such that sediment and debris will not collect in the backwater upstream of the wetland diversion weir.

- Where the pipe system invert is above the invert of the wetlands, the diversion to wetlands component should be placed downstream of the water quality device.

Figure 4a Plummer Design 1
Figure 4b Plummer Design 2

- Where the pipe system invert is below the invert of the wetlands, a separate stormwater quality device would be necessary on the wetland feeder system.

Flood control channels within the Specific Plan area will consist of newly constructed channel systems and parallel flood control channels where avoidance areas are to be maintained in a natural state. These facilities would generally follow or be placed along the natural drainage courses within the project. Utilizing detention basins for the developed condition, stormwater runoff from the Specific Plan area will be reduced consistent with the requirements of the Placer County Flood Control and Water Conservation District (Flood Control District). The flooding limits would be confined within the channels and existing floodplain areas, generally providing 3 feet of freeboard above the 100-year floodplain to adjacent proposed structures. The channels would be excavated below the existing grades, and daylight at the downstream end to natural grades at the project limits. A meandering, naturalized low flow channel would be constructed throughout to confine the conveyance of year round nuisance waters.

In addition to providing detention storage to mitigate the increased rate of runoff, an additional storage component has been added in the detention areas to provide retention of flow volumes for a period of time to allow downstream volumes to drain from the shed. A combination of detention/retention basins will be used in each drainage shed, except Dry Creek, to mitigate the impact of the project stormwater runoff. The Specific Plan includes open space corridors to convey stormwater flows, and all development is planned to occur outside of these corridors to provide 100-year protection to all residences. Pending final design of infrastructure elements (and lotting plans where adjacent), some grading within the open space areas may be required (although no additional wetland fill is anticipated). In order to follow the discussion below, it may be helpful to refer to Figure 5, which outlines the watersheds discussed.

Curry Creek (Shed CUS)

Beginning at the upstream (i.e., eastern) end of the Specific Plan Area, Curry Creek enters the project, crossing Baseline Road in the northeast area of the project. Curry Creek then parallels Baseline Road, and crosses back to the north. The project proposes to excavate overbank areas (i.e., areas where the natural creek can spill floodwaters) at Curry Creek adjacent to Baseline Road, north of the existing channel, and adjacent to the development areas, south of the existing channel. Important natural resource areas would be avoided. The excavation of these overbank areas will enhance the conveyance capacity of the system for Flood Control, and provided additional 100-year floodplain storage within the creek to mitigate development peak flow impacts. The open space corridor associated with Curry Creek and the drainage improvements in this area measures approximately 4505 feet long by an approximate average width of approximately 336 feet, containing approximately 35 acres.

Steelhead Creek Tributary (Shed EMA)

The EMA tributary of Steelhead Creek is the northern most tributary of Steelhead Creek. The tributaries headwaters originate within the project boundaries, south of Curry Creek. The EMA tributary generally conveys runoff in a westerly then northwesterly direction, exiting the project

Figure 5. Regional Watersheds Map

across Baseline Road, near the existing power line corridor. Within this watercourse, the project proposes to reconstruct and enhance sections of the existing swale. Other sections of

the swale will have new flood control channels added which parallel the existing channel which would be kept intact.

Infrastructure drainage elements include an enhanced channel extending west from Ownership Unit #1A, essentially defining the boundary between Ownership Unit Nos. 4 and 7, and terminating at a large detention pond at the west end of Ownership Unit 12A (at the southeast corner of Baseline Road and 16th Street, see Figures 2a and 2b). The open space corridor associated with this drainage shed would be approximately 2.9 miles long with an approximate average width of approximately 345 feet, containing approximately 123 acres. The existing drainage from the southeastern portion of this watershed, originating near the southeast corner of Ownership Unit #7 would remain in its natural state (although it is currently largely supplied by irrigation runoff). This tributary is approximately 1636 feet long and supports riparian vegetation (at its extreme upstream end). This portion of the system would be left intact and in open space with an average corridor width of approximately 439 feet (thus containing an estimated 16 acres).

Steelhead Creek Tributary (Shed EMB)

The EMB tributary of Steelhead Creek headwaters also originate within the Special Planning Area of the project in the northwest area of the project. The EMB tributary will not be altered by the project.

Steelhead Creek Tributary (Shed EMC)

The EMC tributary of Steelhead Creek headwaters originate within the Central and western areas of the project. The existing EMC tributary seasonal wetland swales will be supplemented for Flood Control purposes with parallel channels to the western project boundary. The open space associated with this drainage area would be approximately 6500 feet long with a visually estimated average width of approximately 721 feet (thus containing an estimated 118 acres). At its widest point, this corridor would be approximately 1100 feet wide.

Steelhead Creek Tributary (Shed EMD)

The EMD tributary of Steelhead Creek headwaters originate near the southwest boundary of the project. Onsite the runoff from the tributary areas to this system will be collected and conveyed to the project boundary by a pipe system. The offsite system will not be altered.

Steelhead Creek Tributary (Shed EME)

The EME tributary of Steelhead Creek is completely offsite and downstream of the project. The project will not modify any function of this system.

Steelhead Creek Tributary (Shed EMF)

The EMF tributary of Steelhead Creek headwaters originate in the eastern and central areas of the project. There are two tributaries to this system which exit the project at two different points along the southern boundary. The northern tributary exits the project in the western third of the southern boundary. The northern tributary will include modifications to the existing channels including,

complete relocation and reconstruction in the upper reaches, and parallel added flood control channel in the lower reaches where the avoidance strategy is planned for the existing creek areas. The southern tributary of EMF exits the southern boundary of the project at roughly the midpoint of the project. Channel improvements planned for the southern tributary include new parallel flood control channels, and avoidance and some new channels will be created along the southern boundary of the project. The southern and northern tributaries of EMF join south of the project. The open space associated with the southernmost portion of this system (Shed EMFS) spans a distance of approximately 2.1 miles with an approximate average width of approximately 196 feet (thus containing an estimated 50 acres). It is joined by a tributary system with which the associated open space would be approximately 4108 feet long by 610 feet wide (thus containing approximately 58 acres). More centrally located within the plan area (shed EMFN) there would be a relocated and enhanced channel which would span approximately 1.1 miles, terminating at Palladay Road. Average width for this reach would be approximately 188 feet (thus containing approximately 25 acres of open space). Downstream of Palladay Road, with the exception of a road crossing for West Dyer Lane, the existing creek system (which supports scrub riparian vegetation) would be left intact. The open space associated with this reach is estimated at approximately 3200 feet long by 536 feet wide (thus containing approximately 39 acres).

Steelhead Creek Tributary (Shed EMG)

The EMG tributary of Steelhead Creek originates in the southeastern third of the project. The runoff from the project would be collected in storm drain pipes and discharge to a detention basin upstream of the project boundary. Flows exiting the basin will be discharged into the existing drainage swale.

Dry Creek

Dry Creek bounds the southeastern area of the project. Water in Dry Creek passes adjacent to the project in a southwesterly direction. Dry Creek will not be altered by the project. Stormwater quality basins and treatment measures will be placed at the drainage system outfalls upstream of their discharge into Dry Creek.

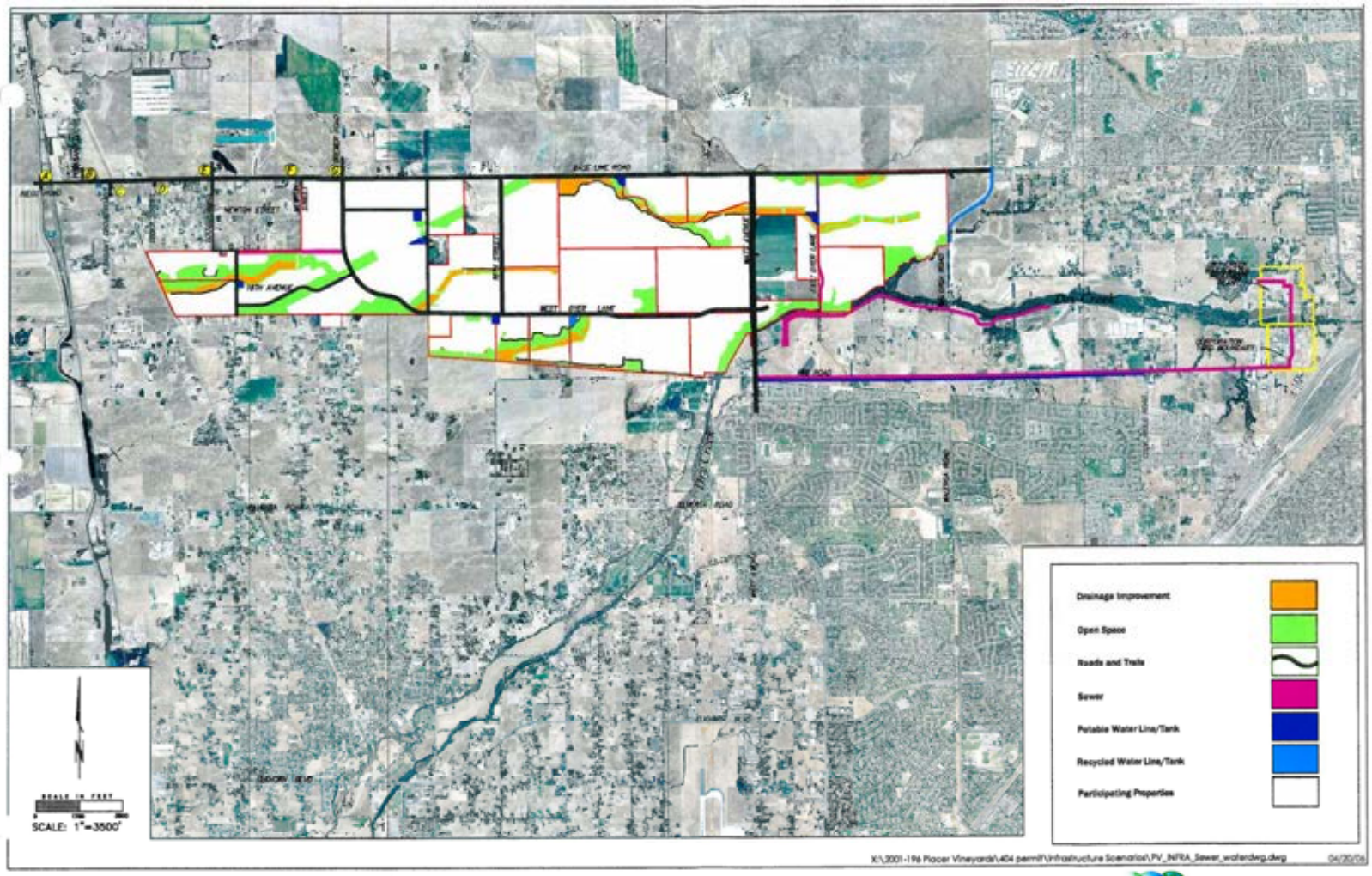


Figure 6c. Infrastructure Elements, Impact Scenario 3 (Most Likely)

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Figure 1 PVSP Infrastructure Elements