

Response to:

DIABLO GRANDE SPECIFIC PLAN  
DRAFT ENVIRONMENTAL IMPACT REPORT

Prepared for:

Mr. Tim Ford

Prepared by:

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October 15, 1992

1 When proposed development plans are available, the following  
2 should be conducted:

- 3  
4 "1. Conduct adequate cultural resources field studies and  
5 record all discrete site locations on state-approved site  
6 survey forms.  
7  
8 "2. If necessary, conduct mechanical subsurface testing to  
9 determine the extent and depth of any cultural resource  
10 locations.  
11  
12 "3. Stake all resource locations so that they can be  
13 accurately mapped by professional surveys.  
14  
15 "4. Revise specific site plans to avoid sites.  
16  
17 "5. If avoidance is not possible, evaluate the significance of  
18 each site and develop specific mitigation plans for each  
19 significant resource."  
20

- 21 7. Use of resources is addressed on page V-7 of the EIR under "Significant  
22 Irreversible Environmental Changes ..." An analysis of energy use has  
23 been added in response to comment 38 in Thomas Reid Associates'  
24 October 1, 1992 comment letter.  
25  
26

## State Clearinghouse Identification Number

CEQA Section 15086 requires the Lead Agency to consult with and request comments on DEIRs from state Responsible and Trustee agencies when such agencies have jurisdiction by law over resources affected by the project. In order to facilitate this requirement, CEQA Section 15205 requires all projects to be submitted to the State Clearinghouse for distribution to state Trustee and Responsible Agencies.

When a document is submitted to the State Clearinghouse for review an identification number is issued by the Clearinghouse for the document. The identification number should be included on the title page of the document. The DEIR does not include a State Clearinghouse Identification Number. This may suggest the document has not been submitted to the Clearinghouse or state Responsible and/or Trustee Agencies as required.

## Recirculation of the DEIR

The DEIR released for public review falls far short of being adequate under CEQA. Although the document is voluminous and the information is educational, it does not directly relate to impacts shown to be associated with the project and mitigations to offset those impacts.

For example, the biological resources section goes into great detail describing habitats and species which may exist in those habitats onsite. It fails, however, to identify whether those species do exist on site. The DEIR speculates as to the existence of the species onsite. Without knowledge of the existence and the extent of existence of protected species onsite, it is impossible to determine the adequacy of mitigation measures proposed.

The public and reviewing agencies are at a distinct disadvantage in attempting to review the document. Little that is required to be included is actually included.

Public Resources Code 21092.1 requires the recirculation of the DEIR when certain situations exist.

When significant new information is added to an environmental impact report after notice has been given pursuant to Section 21092 and consultation has occurred pursuant to Section 21104 and 21153, but prior to certification, the public agency shall give notice again pursuant to Section 21092, and consult again pursuant to Sections 21104 and 21153 before certifying the

environmental impact report.

The inadequacies inherent in this DEIR must be corrected. The document must then be recirculated for public and agency review per Section 21092.1.

### Project Description

CEQA Section 15378 defines the term "project". "'Project' means the whole of an action, which has a potential for resulting in a physical change in the environment, directly or ultimately...(Section 15378(a))." "The term 'project' refers to the activity which is being approved and which may be subject to several discretionary approvals by governmental agencies. The term 'project' does not mean each separate governmental approval" (Section 15378(c)). The project is not the approval itself, but that which is being approved.

A precise project description is critical to the CEQA process. Without a complete and accurate project description potential adverse environmental impacts which may be associated with the project can be overlooked.

The project description provided in the DEIR is insufficient. The Comments on Diablo Grande DEIR submitted by Mr. Eric Parfrey, Senior Planner, San Joaquin County Planning and Community Development Department, dated October 1, 1992, are hereby incorporated by reference in their entirety into this document.

### Adequacy of Biological Field Surveys

The overall proposed project site (excluding Phase 1) was surveyed on April 26 and 27, 1990. "The survey of the remainder of the project site [everything except Phase 1] was a preliminary assessment. The Overall Site was accessed where possible by four-wheel drive vehicle, and general information on vegetation types, plant and wildlife species observed, and the potential for habitats and species of special concern occurring on the site were recorded. The proposed primary access road area between Del Puerto Canyon Road and Oak Flat Road was not included in this preliminary survey but is being surveyed in the spring of 1992." (Field Surveys, page IV-97, DEIR).

In two days approximately 29,500 acres were surveyed. As the DEIR states this "survey" was merely a preliminary assessment. The assessment was completed to obtain general information pertaining to the biological resources on site and determine "the potential for habitats and species of

3 (Cont'd)

4

5



special concern" which could occur on site (emphasis added). Only portions of the site which could be easily accessed were assessed. Survey methodologies recommended by the U.S. Fish and Wildlife Service and the California Department of Fish and Game were not used.

A two day assessment of potential habitat on over 25,000 acres does not qualify as an adequate biological survey.

An adequate survey provides detailed specific information pertaining to the biological resources on the site. An adequate biological survey would include specific information detailing the location and quantity of all vegetation and wildlife occurring on the proposed site. An adequate survey would include maps showing locations of species and habitats of special concern. An adequate survey would be conducted using the survey methodologies recommended by the U.S. Fish and Wildlife Service and the California Department of Fish and Game for the species of concern.

An adequate survey is critical to the environmental review process. "An EIR shall identify and focus on the significant environmental effects of the proposed project. Direct and indirect significant effects of the project on the environment shall be clearly identified and described...The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems..." (CEQA Section 15126(a)). "The information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public." (CEQA Section 15147).

The information presented in Section D. of the DEIR does not meet the requirements of CEQA. Most of the information presented in Section D. is speculative and conjectural.

Species of special concern which may occur on the proposed project site are addressed on pages IV-109 to IV-121. Each species listed includes a general description of the species and its known range. An assessment is then made as to the potential for the species occurring on the project site. The assessment does not include an actual search of the site for the species, merely the probabilities of the species occurring onsite.

This does not meet the requirements of CEQA to clearly identify and describe project impacts. The DEIR does not identify and describe impacts, it describes potential impacts

and makes no effort to evaluate whether the impact will actually occur.

This approach also makes it impossible to propose mitigation measures for such impacts in accordance with CEQA Section 15126(c). Section 15126(c) requires mitigation measures to be proposed to offset impacts which will result from project implementation. When addressing mitigations in a DEIR "discussion shall identify mitigation measures for each significant effect identified in the EIR." (CEQA Section 15126(c)). When no significant effects are identified in the DEIR specific mitigation measures cannot be developed.

The information presented in this section of the DEIR is more reflective of information which should have been included in the Initial Study of the project. The Initial Study is used to identify potential impacts. Once a potential impact has been identified surveys, studies, or other means of obtaining quantifiable, qualifiable information are conducted to determine the actuality of the impact. When the degree of impact is determined the level of mitigation needed to offset the impact can be ascertained.

#### Biological Resource Mitigation Measures

Various of the mitigation measures call for surveys and plans to be developed subsequent to project approval. This is inappropriate and defeats the intent of CEQA. The basic intent of CEQA is to disclose to the public and to decision-makers the impacts which will occur if the project is approved as proposed (Section 15002(a)(1)).

Several Appellate Court decisions have upheld the requirements of CEQA to identify specifically impacts which may be associated with the project prior to project approval. In *Sundstrom v. County of Mendocino* (1st Dist. 1988) 202 Cal.App.3d 296 [248 Cal.Rptr. 352] the Court ruled the county violated CEQA by approving the project on the condition that mitigation measures be developed and implemented at a later date. The Court found this approach to approving projects to be in contradiction to what is required to be disclosed to the public prior to project approval.

The DEIR calls for mitigation measures (biological surveys) to be conducted after project approval. No comprehensive biological survey has been conducted for the proposed site even though threatened and endangered species are believed to occur on site.

Since no comprehensive survey has been completed it is

unknown if other mitigation measures proposed for biological resources will be effective at reducing impacts to levels of insignificance. There is no evidence in the record to verify proposed mitigation measures will indeed mitigate the adverse impacts to levels of insignificance.

This is of particular importance as the project includes a specific plan. Once a specific plan has been adopted, no further CEQA work is required unless new information which was not known and could not have been known comes to light or the project applicant changes the project significantly from what was approved in the specific plan. If the project proceeds as proposed it is very possible there will be no further CEQA review of this project.

The Introduction, page II-2, identifies this DEIR as being a "program-level" analysis of the Specific Plan and Phase 1. A program EIR, as outlined in CEQA Section 15168(c)(2), "can approve the [later] activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required" if the agency finds that the later activity would have no new impacts per Section 15162. This would have the same effect as the exemption for projects consistent with Specific Plans; no further CEQA would be required.

#### Consultation with U.S. Fish and Wildlife Service

Very little mention is made of the federal Endangered Species Act or the role of the U.S. Fish and Wildlife Service in permitting "takes" of federally listed threatened and endangered species. CEQA Section 15086(a)(3) requires the Lead Agency to submit the DEIR to "[o]ther state, federal, and local agencies which exercise authority over resources which may be affected by the project". The Lead Agency is required to submit the DEIR to the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and any other federal agencies which exercise authority over the project. This consultation is to take place during the noticed public review process. It would appear this consultation has not occurred due to the lack of information cited or included in the DEIR.

#### Cultural Resources

CEQA, Appendix K, provides guidance for evaluating and mitigating projects which have archaeological impacts. Appendix K is incorporated by reference in its entirety into this response.

Section VII of Appendix K places limits on mitigations which may be imposed to offset impacts to archaeological resources.

- A. If it is not feasible to revise the project to avoid an important archaeological resource, the Lead Agency shall require the project applicant to guarantee to pay one half of the cost of mitigating the significant effect of the project on important archaeological resources.
1. In determining the payment to be required from the applicant, the Lead Agency shall consider the in-kind value of project design or expenditures intended to permit any or all important archaeological resources or California Native American culturally significant sites to be undisturbed or preserved in place.
    - a. Consideration of in-kind values does not require a dollar for dollar set-off against the payment by the project applicant.
    - b. In deciding on an appropriate set-off, the Lead Agency shall consider such factors as whether the project design or expenditures would provide other benefits to the applicant and whether the design or expenditures required special changes in the project plans.
  2. When it decides to carry out or approve the project, the Lead Agency shall, if necessary, reduce the mitigation measures specified in the EIR to those which can be funded with:
    - a. The money guaranteed by the project applicant, and
    - b. Money voluntarily guaranteed by any other person or persons for the mitigation.
  3. In order to allow time for interested persons to provide a voluntary funding guarantee, the Lead Agency shall not decide to carry out or approve a project having a significant effect on important archaeological resources until 60 days after completing the final EIR on the project.
  4. In no event shall the Lead Agency require the applicant to pay more for mitigation within the site of the project than the following amounts:

- a. One half of one percent of the projected cost of the project, if the project is a commercial or industrial project.
- b. Three fourths of one percent of the projected cost of the project for a housing project consisting of one unit.
- c. If a housing project consists of more than one unit, three fourths of one percent of the projected cost of the first unit plus the sum of the following:
  - (i) \$200 per unit for any of the next 99 units,
  - (ii) \$150 per unit for any of the next 400 units,
  - (iii) \$100 per unit for units in excess of 500.

This information is missing from the DEIR. No guarantee, as required, is included in the proposed mitigations pertaining to payment of the mitigation as outlined in the section.

The DEIR identifies Locus 7 as containing human burial grounds. Section VIII of Appendix K addresses how projects must be handled when human remains, not in a dedicated cemetery, are discovered on site.

- A. In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:
  1. The coroner of the county in which the remains are discovered has been informed and has determined that no investigation of the cause of death is required, and
  2. If remains are of Native American origin,
    - a. The descendants from the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section

5097.98, or

- b. The Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission.
- B. Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.
- 1. The Native American Heritage Commission is unable to identify a descendant;
  - 2. The descendant identified fails to make a recommendation; or
  - 3. The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.
- C. If the human remains are discovered before the Lead Agency has finished the CEQA process, the Lead Agency shall work with the Native American Heritage Commission and the applicant to develop an agreement for treating or disposing, with appropriate dignity, of the human remains and any associated grave goods. Action implementing such an agreement is exempt from:
- 1. The general prohibition of disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
  - 2. The requirements of CEQA and the Coastal Act.

Appendix K clearly spells out the requirements of the Lead Agency when archaeological artifacts and/or Native American human remains are discovered on a proposed project site. Those requirements have not been met in this DEIR. Additionally, Section VII(B)(3) of Appendix K expressly prohibits a mitigation plan from violating any laws protecting American Indian cemeteries.

**RESPONSES TO PATTY HOBBS, ENVIRONMENTAL CONSULTING OCTOBER 15, 1992  
COMMENT LETTER**

1. The EIR's SCH# was inadvertently omitted from the title page. It is SCH# 91032066. The EIR was submitted to the State Clearinghouse for distribution to responsible and trustee agencies on September 4, 1992. See the Governor's Office of Planning and Research October 19, 1992 comment letter.
2. See U.S. Fish and Wildlife Service comment letter, responses 1, and 2. The EIR describes sensitive species which potentially could be found on the project site and identifies those which have been found as a result of field surveys conducted to date. Additional surveys are recommended for species that were not detectable at the time of the initial surveys. These species are ones largely restricted to specialized habitats such as rock outcrops or stream channels which are not proposed for development. Project impacts to such species would not be direct habitat removal and mitigation would occur through the measures included in the proposed management plans.
3. Comment noted. The County Board of Supervisors would be responsible for determining if changes in the EIR resulting from responses to comments are substantial and require EIR recirculation.
4. The commenter's opinion is noted. The County considers the EIR project description to be adequate per CEQA requirements. Refer to response to comment 1 of the Merced County Planning Department October 15, 1992 comment letter for a revised Introduction chapter to the EIR.  
  
Should the commenter desire greater detail of information regarding the Specific Plan, copies of the Plan are available for review at the County Department of Planning and Community Development office in Modesto.
5. See U.S. Fish and Wildlife Service comment letter, responses 1, and 2.  
  
Because of the time frame for development of the Phase 2-4 areas, more extensive surveys of biological resources will be done prior to consideration of specific development plans for these four areas.
6. See U.S. Fish and Wildlife Service comment letter, responses 1, and 2.
7. The commenter's opinion is noted. The EIR includes extensive lists of mitigation measures; additional measures have been incorporated in response to comments on the EIR. See the Mitigation Monitoring Program for a compilation of all mitigation measures.

## Evaluation of and Response to Comments

CEQA Section 15088 describes how responses to DEIRs must be analyzed and addressed.

- (a) The Lead Agency shall evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response. The Lead Agency shall respond to comments received during the noticed comment period and any extensions and may respond to late comments.
- (b) The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, the major environmental issues raised when the Lead Agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail giving reasons why specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice.



1 8. Comment noted. The surveys and plans called for as mitigation in this  
2 EIR are associated with implementation of the project, not with the  
3 identification of impacts, with the exception of additional sensitive  
4 plant, reptile, and amphibian surveys, which have been performed and  
5 are incorporated in this FEIR.  
6

7 9. Biological surveys for the Phase I development area were conducted  
8 and, as described in the previous comment, additional studies have  
9 been carried out. The remaining portions of the ranch have only been  
10 subject to reconnaissance-level surveys and will require more detailed  
11 biological surveys prior to consideration of development plans.  
12

13 As described in the text of the EIR (page V-1), several of these impacts  
14 are significant and unavoidable and mitigation measures will not  
15 reduce them to insignificant levels. See also response to comment 2  
16 of the Sierra Club October 14, 1992 comment letter.  
17

18 10. The Introduction chapter of the EIR has been revised to more clearly  
19 detail the level of future environmental review to be required (see  
20 response to comment 1 of the Merced County Planning Department  
21 October 15, 1992 comment letter.) The applicant has agreed to waive  
22 its rights under CEQA Section 151658(c)(2) and will prepare  
23 subsequent CEQA documentation for later phases.  
24

25 11. Refer to response to comments 6a, 6b, and 13 of the U.S. Fish and  
26 Wildlife Service October 16, 1992 comment letter. The EIR was  
27 circulated to the U.S. Fish and Wildlife Service, U.S. Army Corps of  
28 Engineers, and other federal, state, and local agencies.  
29

30 12. The commenter's concerns regarding the process of funding mitigation,  
31 of cultural resources as outlined in Appendix K of CEQA are noted.  
32 They are not relevant at this point in time. Mitigation is only an issue  
33 for cultural resources after it has been demonstrated that the resources  
34 will be either directly or indirectly impacted by the development, and  
35 evaluation of the resources has demonstrated that they are "significant"  
36 and therefore worthy of mitigation. No final, detailed mitigation, and  
37 therefore no caps on expenditures for that mitigation can be developed  
38 prior to the evaluation of the significance of those resources in danger  
39 of being impacted. The requirements for that mitigation are set forth  
40 in the Mitigation Monitoring Program. See also response to comment  
41 12 of the Normoyle and Newman October 19, 1992 comment letter.  
42

43 The comments concerning the handling of Native American remains are  
44 correct. This process has not been followed to date because the  
45 remains discovered during the field inspection were isolated finds,  
46 probably dragged from burial locations by burrowing animals. The  
47 Native American Heritage Commission should be contacted early in the  
48 process to discuss with them who they recommend to act as Most  
49 Likely Descendant for the Diablo Grande area, so that the project

1  
2 sponsors and the archaeologists retained to work on the project can  
3 come to agreement about handling of the remains before they are  
4 accidentally discovered. Such an agreement with the Most Likely  
5 Descendant or the Heritage Commission (in the absence of an  
6 interested Descendant) would save much time; it should be noted that  
7 there already is some site development occurring in the form of test  
8 vineyards and a turf farm.

9  
10 13. Comment noted:  
11

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October 19, 1992  
Page 2

"'Open space' or 'open area' means any space or area characterized by great natural scenic beauty or whose existing openness, natural condition, or present state of use, if retained, would enhance the present or potential value of abutting or surrounding urban development, or would maintain or enhance the conservation of natural or scenic resources."

On the basis of this definition, Diablo Grande contains no true "Open Space" resources for the following reasons:

1. The Oak Flat Ranch is 7 miles from the nearest public highway, 6 miles from the nearest paved road and 10 miles from the nearest town. At complete buildout of the Diablo Grande project, the Open Space views, uses and characteristics of the Coast Range foothills in the Central Valley, and Stanislaus County in particular, will be virtually unchanged;
2. There is no abutting or surrounding urban development which would be affected by the construction of Diablo Grande; and
3. The Diablo Grande site now offers no scenic resources to the public whatsoever in that it is now a ranch which is closed to the public and practically inaccessible due to its distance from paved roads.

Secondly, even if some of Oak Flat Ranch is deemed "Open Space", the development of Diablo Grande will not result in a significant adverse impact on the Open Space resources of Stanislaus County. The County now contains approximately 894,000 acres of undeveloped land lying outside of the cities existing spheres of influence. Applying the same liberal definition of "Open Space" which would include Oak Flat Ranch, most if not all, of this 894,000 acres would be considered "Open Space." At project buildout roughly 12,000 acres will be converted to urban uses. On this basis, the Diablo Grande project will be affecting one percent (1%) of the County's open space resources, and that 1% is well beyond public view, closed to public access, and practically inaccessible to the public.

Thirdly, Diablo Grande is creating over 18,000 acres of Open Space areas within the Diablo Grande project in golf courses, conservation areas, parks, vineyards and greenbelts adjacent to urban development which will enhance the value of that urban development. As water is delivered to the parched landscape, the scenic beauty of creekways, valleys and slopes throughout the ranch will be greatly enhanced. Indeed, the Diablo Grande project will add qualitatively and quantitatively to this County's Open Space inventory.

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October 19, 1992

HAND-DELIVERED

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**RECEIVED**  
OCT 19 1992

Re: Comments to Diablo Grande Draft EIR

STANISLAUS COUNTY  
PLANNING COMMISSION

Dear Bob:

Thank you for the opportunity to respond to the Diablo Grande Draft EIR. The following is our response on behalf of Diablo Grande.

**1. DISTINGUISHING OVERALL IMPACTS FROM PHASE I IMPACTS IN THE SUMMARY:**

The FEIR should identify whether each potential impact and mitigation measure in the mitigation summary is an Overall development impact or mitigation (O), a Phase I impact or mitigation (P), or both (O,P). This would aid in the implementation of the Mitigation Monitoring Program.

**2. OPEN SPACE:**

This comment pertains to the third potential impact and mitigation measure on Page II-1. With regard to the potential impact, Diablo Grande disagrees that the loss of open space is significant and unavoidable. First, we question the conclusion that this private cattle ranch should even be considered open space. Section 50580 of the Government Code defines open space as follows:

1

2

The existing mitigation measure is infeasible. This mitigation measure will put land under a restriction, which will then be constantly revised as the Estate Lots are developed. The County Board of Supervisors, through its police power, and land use authority, has the ability to achieve the same mitigation as that which is now proposed. The Board must continue to maintain the authority over future land use decisions. Future land use revisions may only occur, if they further the Goals and Policies of the county's General Plan. The following mitigation measure would reduce this impact to a level of insignificance:

"To ensure that proposed Conservation Areas remain open space, the Conservation Areas will be zoned "Agriculture", as set forth in the Stanislaus County Zoning Ordinance as modified by the Diablo Grande Specific Plan. No uses shall be permitted in the Conservation Areas, not in keeping with that Agricultural zoning, as amended, in the Specific Plan. If uses not permitted by the Agricultural zoning are requested, a rezoning of the property, or amendment to the Specific Plan, shall be requested and shall be subject to environmental review pursuant to the California Environmental Quality Act (CEQA)."

The proposed mitigation measure allows for protection of the Conservation Areas, but also allows for flexibility in the long-term use and monitoring of the Conservation Areas. It allows the Board of Supervisors flexibility in establishing a mechanism for regulating land use in the Conservation Areas, and will allow the issue of open space uses and areas to be revisited in the future by the Board, subject to environmental review if, at a time in the future, an amendment to, or revision of, the Agricultural zoning is appropriate, reasonable, and furthers the County General Plan Goals and Policies.

### 3. SEISMICITY:

This comment pertains to the fifth mitigation measure on Page II-6. As worded at this time, the first sentence of this measure states that:

"All interior fixtures, utilities, and furnishings shall be securely attached to the walls, floors, or ceilings to reduce the risk of damage or injury from falling objects."

If construed literally, this mitigation measure requires all residences to securely fasten dining room chairs and tables, couches, beds, televisions, stereos and other home furnishings to the floor. The method of attachment (e.g. bolts, nails, or glue) is unclear. Such a task is unnecessary and impossible to successfully implement. Will the placement of furnishings within homes, offices and other facilities be allowed only upon issuance of a permit by the County to assure compliance with the fastening rule? Must homeowners, business owners or hotel operators

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obtain amendments to this "furnishing installment" permit when they decide to move the furniture around from time to time. This will be the height of regulatory intrusion into the privacy of the lives of citizens and yet another example why it is becoming virtually impossible to attract businesses to this State. We would offer that the intent of this mitigation measure is to protect the public in public places to the highest degree possible. We therefore offer the following as an alternate mitigation measure which accomplishes this objective without creating a rule impossible to enforce:

"All interior fixtures and utilities in public places shall be securely attached to reduce the risk of damage or injury from falling objects. These attachments shall be made in compliance with all State and local building codes."

#### 4. SOILS:

This comment pertains to the first mitigation measure on page II-8. It should be revised to read as follows:

"Where corrosive soils pose a threat, underground utilities, and subsurface steel and cement structures shall be protected either through the provision of a buffer zone or trench filled with non-corrosive material such as gravel or neutral soil, or the encasement or lining of the underground project improvements."

This revised wording will clarify that these additional measures and/or improvements are only required in areas where corrosive soils actually pose a threat to the improvements.

#### 5. WILDLIFE:

This comment pertains to the first potential impact on Page II-12. It states:

"The project could result in the loss of up to 50 percent of the habitat present in the site.(S)"

We must take exception to the determination that this impact is significant and unavoidable. Although Diablo Grande will remove some habitat, the vast non-developed areas within the project will be greatly enhanced in their wildlife supporting abilities. Proper management coupled with the introduction of stable, good water in arid areas such as the California Coastal Mountains will more than double wildlife habitat productivity (Dr. Steven W.

Carothers, PhD. Zoology, M.S. Biology). This is precisely what Diablo Grande proposes to do, yet the habitat enhancing probabilities of this project are consistently ignored. In fact, the creation of Conservation Areas, greenbelts, and wildlife corridor on the Ranch combined with the introduction of water to the streams and creekways will positively impact habitat productivity. This reality, coupled with the 31 Overall Site and 16 Phase 1 area mitigation measures will reduce this impact to less than significant.

#### 6. ESTATE LOTS:

This comment pertains to the first potential impact and associated mitigation measures on Page II-13. It states:

"Estate lot development would significantly affect wildlife use of major portions of the site, present barriers to wildlife movement, and disturb larger wildlife species. (S)"

These lots by themselves do not create a significant unmitigable impact. The potential impact on page II-12 is all that needs to be stated regarding the overall impact of the Diablo Grande Specific Plan on wildlife.

The following measures, as guidelines, will aid in the reduction of the impacts of Estate Lots on the Conservation Areas:

- "12. The following guidelines are intended to reduce the impacts of the development of up to 100 proposed estate lots on Vegetation and Wildlife. These guidelines are specifically designed for, and apply only to, the estate lots proposed in the Conservation Areas.
  - a. No more than 0.5 acre (excluding driveways and parking areas) shall be developed with structures or impervious surfaces on any estate lot.
  - b. The undeveloped portions of any estate lot shall be fenced from the developed portion or dog runs established in the developed part of the lot in such a manner as to prevent dogs from accessing the undeveloped area.
  - c. Landscaping shall not exceed one acre on any estate lot.
  - d. No houses shall be constructed within the designated wildlife corridors.

- e. Estate lots shall be in clusters of three or more where possible, and use a common driveway.
- f. An attempt should be made to minimize the number of remote lots constructed in the Conservation Areas. Wherever possible, driveways to remote lots should service more than one parcel. Any driveways which will be required to cross wildlife corridors will be subject to environmental review as part of the Site Plan Review process for the sake of determining the most environmentally sensitive location. Discrete signing shall be posted at either end of the wildlife corridor which states "Wildlife Crossing 10 mph". Under no circumstances shall greater than 50% of the estate lots allowed/required to have roadways crossing wildlife corridors.
- g. Estate lots may be subdivided only upon a finding of the County Planning Commission that, based on a CEQA review, such subdivision could constitute an environmentally superior alternative to not permitting the subdivision. This may require a cumulative impact analysis involving all 100 potential estate lots. In no case shall the total number of estate lots exceed 100 lots after subdivision.
- h. All estate lots will be subject to Site Plan, Architectural and Environmental Review. The purpose of this review will be to make certain that visual impacts on the balance of the Diablo Grande project will be minimized.
- i. Prior to development of each estate lot, a biotic resource survey shall be conducted of the lot to determine if there are significant biological resources present. If such resources are found, any development shall be designed to avoid affecting the resource to the satisfaction of the County Planning Department.
- j. Oak tree removal on estate lots shall wherever possible amount to less than five percent of the existing oak trees. If greater than five percent of the oak trees are scheduled for removal, each oak tree over the five percent shall be replaced at a 5:1 ratio."



7. STREAM CROSSINGS:

This comment pertains to the fourth mitigation measure on page II-15. It needs to be revised to be consistent with the third mitigation measure on page II-14. The stream crossings are subject to review by:

- a. U.S. Fish and Wildlife Service;
- b. California Department of Fish and Game;
- c. Army Corps of Engineers; and
- d. Stanislaus County Department of Public Works.

There is no need for the mitigation measure to be overly restrictive regarding the type of crossing to be employed. Flexibility in design is imperative. The third mitigation measure on page II-14 states the installation of either bridges or box culverts was acceptable mitigation. We request that the mitigation measure on page II-15 be revised to state that either bridges or box culverts are appropriate. In fact, Diablo Grande would like the flexibility to install arch pipe or other type of improvement, subject to the review and approval of the previously mentioned agencies.

8. KIT FOX:

This comment pertains to the first mitigation measure on pages II-16 & II-18. Since the San Joaquin kit fox is protected under the Endangered Species Act, the responsibility for mitigating the impacts on the kit fox lies with the U.S. Fish and Wildlife Service. To more accurately reflect the roles of agencies with jurisdiction on this issue, the mitigation measure now proposed should be revised to read as follows:

"Based upon consultation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, the following should be considered the maximum acceptable mitigation to be implemented as part of the access road design within the mapped kit fox range:

- a. Four foot by Six foot undercrossings at approximately 1/4 mile intervals; and
- b. Hog-wire fencing with a mesh size of approximately six inches by eight inches, topped with three strands of barbed wire, on both sides of the roadway."

#### 9. GROUND SQUIRRELS:

This comment pertains to the first mitigation measure on page II-19. It needs some clarification. It is not practical to prohibit ground squirrel poisoning in all portions of the Conservation Areas. The possibility of estate lots and other uses consistent with the proposed open space use of the Conservation Areas may necessitate the use of some poisons for ground squirrels. Examples of some uses which could require the use of poisons would be:

- a. Estate Lot homesites;
- b. Game preserves; and
- c. Limited cattle grazing.

A more appropriate mitigation measure would be as follows:

"Ground squirrel habitat should be retained, where possible, in Conservation Areas. Use of poisons shall be limited to those poisons that are of low risk to non-target species. Any poisoning of squirrels in Conservation Areas beyond the immediate site of an estate lot shall be submitted to the Planning Department with a Conservation or Game management plan, and approved by Planning and the Agricultural Commissioner prior to application of the poisons."

#### 10. PRAIRIE FALCON:

This comment pertains to the second impact and mitigation measure set forth on Page II-19 and Mitigation Measure No. 47 on Page IV-133. The mitigation measure incorrectly states there is an active prairie falcon nest within the rock outcrop present in Indian Rock Park. Pursuant to a request by LSA in 1990, careful and constant observation of this area has been ongoing for over two years (Stan Duck, Field Coordinator). There has been no prairie falcon use of this rock outcrop for over two (2) years. The last documented sighting of the use of this area by the prairie falcon was in the spring of 1990. The inclusion of the rock outcrops within wildlife corridors as recommended below, will be adequate mitigation. Therefore, we recommend the following to replace the second mitigation measure on Page II-19:

"The 1/4 mile wildlife corridor required for wildlife movement between villages is now subject to further review and refinement, but with respect to the area containing the nest site located within the proposed Indian Rocks Park, this corridor shall be mandatorily placed with its center generally located on the nest, thereby creating a minimum development setback from the cliffs forming rock outcrops of approximately 1/8 mile."

This mitigation measure balances development plans and prairie falcon protection, in an objective and workable manner, and will reduce the impact on the abandoned prairie falcon nest to less than significant. Therefore, we believe that Mitigation Measure No. 47 for the Phase 1 area should be deleted and Mitigation Measure No. 31 on Page IV-131 be substituted in its place. This mitigation measure states that:

"Cliff-forming rock outcrops shall be included in project open space areas. Keep trail systems away from these outcrops. Trail distances shall be established through consultation with raptor specialists with DFG and USFWS. Rock outcrops or cliffs which contain active raptor nests shall be off-limits to human use during the nesting season (March through August)."

This mitigation measure will protect all the cliff-forming rock outcrops and in conjunction with, the mitigation proposed in the mitigation summary, will also protect the area containing the abandoned prairie falcon nest, and will reduce the level of development impacts on this resource to levels less than significant.

#### 11. CULTURAL RESOURCES:

This comment pertains to the mitigation measures set forth at the end of Page II-19 and at the beginning of Page II-20 regarding cultural resources. First, these mitigations are confusing because mitigations for the overall site and mitigation for the Phase 1 area are not distinguished. Since a detailed evaluation of the Phase 1 area was performed, there is no reason for additional studies to be recommended or undertaken within the Phase 1 area. Future studies are appropriate for the balance of the project, where detailed investigations have not been performed.

In fact, the mitigation measures set forth on pages IV-162 & 163 in the Cultural Resources section of the document set forth that the only required mitigation needed as part of the Phase 1 development relates to Locus 7 in the Indian Rocks Park area, and Locus 9H, the Oak Flats Ranch. The mitigation measures set forth in the mitigation summary need to be specific regarding future studies in future development areas, or set forth the specific mitigation measures proposed in the text for the Phase 1 area.

Second, we believe that the mitigation summary is inconsistent with the mitigation measures proposed in the cultural resources section of the document, which in turn is inconsistent with the text in the cultural resources section. We recommend the following language be

Mr. Bob Kachel  
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Page 10

substituted for the existing mitigation summary to resolve both the clarity and consistency concerns:

### "POTENTIAL IMPACT

Direct impacts from grading, excavation, trenching, etc., may impact cultural and historic resources in future phases of development. (SM)

The following cultural resources have been identified within the Phase I development area.

#### Historic Resources:

- Locus 9H
- Locus 10H/11H/12H
- Locus 18H

#### Prehistoric Resources:

- Locus 7
- Locus 13
- Locus 14
- Locus 15

Direct and secondary impacts may occur to these resources due to the development of the Phase I area. (SM)

### MITIGATION MEASURES

Prior to approval of future phases of development, and preliminary development plans, a complete evaluation of resources within each development area shall be undertaken and mitigation measures set forth.

#### Locus 9H:

All standing historic structures shall be preserved. If removal is necessary, treatment shall be as recommended by an architectural historian.

#### Locus 7:

Locus 7 shall be preserved as set forth in mitigation measure no. 7 on Page IV-162 & 163.

#### Loci 10H/11H/12H, 18H, 13, 14 & 15:

Final development plans shall precisely locate these loci, if within 300 feet of any proposed development. These plans shall be reviewed by the Planning Department to determine if any direct or secondary impacts to these resources are likely to occur. If so, an architectural historian, in the case of historic loci, or a archaeologist, in the case of prehistoric loci shall be consulted, recommendations for protection and/or relocation of these resources shall be made and implemented. Efforts shall be made to avoid these resources if at all possible."

## 12. WATER:

This comment pertains to the Public Services and Utilities mitigation measures relating to water on Pages II-20 & 21. We believe some clarification is appropriate. Two separate analyses have been performed regarding the water supply for the Diablo Grande project.

The first relates to the "Overall Water Supply", and the potential impact and mitigation measure set forth at the end of Page II-20 are acceptable. The second analysis relates to the "Well Sites", and their ability to service the initial five-year buildout of the project.

We would offer that the three mitigation measures on Page II-21 relate directly to the "Well Sites", their use for the initial five years of project construction, and the associated impacts on surrounding properties and the aquifer. In keeping with the text on Pages IV-164 through 179, and the fact that, with mitigation, the impact of the five-year buildout using the Well Sites for water supply is less than significant, we would request that the following potential impact statement be set forth in the mitigation summary preceding the three mitigation measures on Page II-21:

"Well Sites on the valley floor will be used to provide water for up to 1200 Acre-Feet of water per year, but could impact the aquifer lying beneath property in the area.(SM)"

### 13. ENERGY USAGE:

This comment pertains to the first mitigation measure on Page II-24. It is unrealistic. A conservative reading of this mitigation measure would require all structures within the development to have the wall with the majority of the windows north facing. We believe the intent of this mitigation measure is that all structures incorporate energy efficient design standards, such as compliance with Title 24 of the California Administrative Code, which is mandatory. On this basis, we recommend the language "Residences shall be positioned to reduce energy use" be deleted and the following language be substituted in its place: "Residences shall incorporate energy efficient design standards in compliance with State and local standards."

### 14. VISUAL QUALITY:

This comment pertains to the second potential impact on Page II-24. We recognize there will be a change in the visual characteristics of the area as Diablo Grande develops, but we disagree this is an impact which is adverse and we disagree that it will affect the existing visual inventories of any residents of Stanislaus County. Those who purchase homes in Diablo Grande, or come to visit, will know specifically what to expect with regard to the visual character of the development, and they will not be disappointed. It will offer a blend of recreational, residential, agricultural, commercial and open space uses rich in visual appeal.

15. IMPACTS TO COUNTY RANGELAND AND AG ECONOMY:

This Comment pertains to the impacts of this project on the County's rangeland resources on Page IV-26 (1-15) for the Phase 1 area, and Page IV-31 (35-45) for the Overall site. First, we recommend removal of the second paragraph on Page IV-26, lines 10-15. This discussion pertains to the Overall Site and does not belong in this section which discusses Phase 1 impacts. This concern is exaggerated when the Overall Site discussion on Page IV-31, lines 35-45, are internally consistent. Page IV-26 states under the Phase 1 discussion, on line 10, that the Overall site contains 22,000 acres of cattle grazing land. Line 38 on Page IV-31, the Overall Site discussion then states that cattle ranching periodically exists on 23,600 acres. This discrepancy needs to be cleared up, and the discussion of Phase 1 impacts and Overall Site impacts needs to be discussed in the appropriate place.

It is also unclear in the DEIR whether the 359,000 acres of "rangeland" includes only rangeland with water available to it, or is limited to land which, like the project site, supports only seasonal grazing because there is no water to support year round grazing. There must be a distinction between irrigated and non-irrigated land because the capacity, and consequent agricultural values, of the two are quite different. If the 359,000 figure does not distinguish rangeland without adequate water from rangeland with water, the impact assumptions in the DEIR statistics are misleading. It follows that if the 359,000 figure is misleading, the 6.5 percent figure based on that acreage is also misleading.

The "value" of the project site in relation to the estimated value of all Stanislaus County Agricultural Production and the Livestock & Poultry and Poultry Products Production by using the 1990 Table IV.A-A of the DEIR for the County-wide production volumes and the gross annual leasehold value of the project site, is less than 0.2%. In an optimal year, the project site will generate \$900,000 in gross lease payments. During 1990, due to the persistent drought conditions, the lease payments were approximately half that amount, or approximately \$450,000. Using these figures and the figures in Table IV.A-A, the following value ratios reflect the relationship of the project site's agricultural "value" to the total County agricultural economy:

Ag Value Ratio of Project Site to Livestock Poultry and Combined Agricultural Economy of Stanislaus County

	<u>1990</u>	<u>Optimal Year</u>
Livestock & Poultry and Livestock & Poultry Products	.08%	.16%
Total County Ag Economy	.04%	.09%

These figures are very tiny fractions of the 6.5 percent figure used for the DEIR. It would take the total elimination of cattle grazing on the project site plus ten sites of comparable size and seasonal grazing characteristics to cause even a 1% reduction in Stanislaus County's total annual Agricultural Production. The gradual termination of seasonal grazing on the project site is an insignificant impact to the County's agricultural economy.

In fact, the DEIR recognizes that this impact can be mitigated. Line 15 on Page IV-26 states that the loss of this rangeland for the Overall Site would be significant "if not mitigated". Although the impact on rangeland and resources is insignificant based upon the previous discussion, mitigation is also offered in the document for the preparation of plans to retain cattle grazing, if feasible, on the balance of the site. Diablo Grande is in concurrence with this mitigation measure, although we do not believe that it is required to mitigate any impact, and this long-term mitigation measure, coupled with Diablo Grande's minimal impact on this resource leave no conclusion but that this impact is less than significant.

16. ANIMAL SERVICES OFFICER:

This Comment pertains to mitigation measure no. 11 on Page IV-127. It implies that Diablo Grande has the ability to designate where the tax revenue generated by this project is spent. It would be more appropriate for this mitigation measure to say that the Board shall designate a portion of the tax revenue for this purpose, to a level of service to be determined by the Board.

17. WATER:

This Comment pertains to mitigation measure no. 2 on Page IV-178. As worded, the mitigation measure recommends that the monitoring wells be monitored on a daily basis. This



is an excessive and cumbersome measure, and should be revised to monitoring as determined by the Stanislaus County Department of Environmental Resources, but not less than once per month.

18. NOISE:

This Comment pertains to the mitigation measure beginning at line 37 on Page IV-308, which recommends future acoustic studies. This mitigation measure no. 1 states that:

"As roadway widening and enlargement projects occur from this project and other cumulative development, roadway noise levels would increase audibly over the next 20 years. The widening of roadways and other capacity improvements would, for the most part, contribute to the worsening of the noise environment by promoting larger and faster traffic flows. To alleviate noise impacts, the project applicant, together with all other new developments which would generate new traffic on the road system, should contribute a share toward mitigating noise increases on adjacent insufficiently shielded sensitive receptors. The exact impacts, mitigation, and applicable contributions would have to be determined by acoustic study on a case-by-case basis at the time that roadway improvements are proposed, and should be determined in future environmental review of roadway improvement projects."

This mitigation measure sets forth an unrealistic, open ended mitigation for an unknown impact. It attempts to establish County Policy which is not appropriate in the DEIR. Diablo Grande is responsible for mitigating its impacts, and its impacts alone. This mitigation measure should be revised, at a minimum, to a recommendation to the County that they consider either updating the Noise element in their general plan, or prepare a county-wide cumulative noise analysis. As worded, the "mitigation measure" is not feasible as mandated by CEQA.

19. GEOLOGY, SEISMICITY AND SOILS:

This Comment pertains to Page V-1, lines 18-21. The DEIR here concludes the impact of the Diablo Grande Specific Plan on Geology, Seismicity and Soils is significant and unavoidable. This is confusing because these items are more objective in nature, when considered against the more subjective items such as visual quality and open space. The only supposed significant and unavoidable impact related to this issue, as determined by the DEIR, is that because of the magnitude of the grading proposed, this impact must be significant.



We take exception to this determination. This impact, can be mitigated to a level of insignificance by the application of the twenty three (23) proposed mitigation measures. Mere soil movement is not an absolute basis for a finding of significance. Upon completion of the Diablo Grande project, Mountain ranges and ridgelines will still be mountain ranges and ridgelines, hills will still be hills, valleys will still be valleys, and streams will still be streams. The twenty three (23) mitigation measures proposed will serve to make certain that any grading is done in the most environmentally sensitive way. We recommend this impact be revised to "significant but mitigable."

## 20. VEGETATION AND WILDLIFE:

This Comment pertains to Page V-1, lines 27-46. We dispute the conclusion the impacts of the Diablo Grande project on Vegetation and Wildlife is significant and unavoidable. Three issues of concern are discussed: the San Joaquin kit fox, the prairie falcon and other raptors, and the loss of habitat. For reasons set forth in earlier discussion in these Comments, the impact is less than significant with project mitigation.

## 21. VISUAL QUALITY:

This Comment pertains to Page V-2, lines 13-19. For reasons set forth in earlier discussion in these Comments, the mitigation recommended in the DEIR will mitigate this impact to a level of insignificance.

## 22. ALTERNATIVES:

This Comment pertains to Pages VI-1 through VI-21. The discussion appears adequate in that it discusses three off-site alternatives, a no-project alternative, a general plan buildout alternative (by two methods), and a mitigated project alternative. We do not question the level of alternatives analysis, but do question certain assumptions and statements in the general plan buildout and mitigated project alternative discussions.

With respect to the general plan buildout alternative, the analysis does not look at the actual impacts of general plan buildout in a realistic way. A standard general plan buildout of the project site would incorporate the following:

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(Cont'd)

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1. 184 fenced parcels of approximately 160 acres, thereby eliminating any wildlife corridors;
2. Allowable construction of up to 368 residences;
3. Construction of up to 368 standard septic systems;
4. Continuous, unmonitored cattle grazing or farming, to the detriment of cultural resources;
5. Uncontrolled revisions to vegetation as seen necessary by each property owner;
6. Uncontrolled building site location and architecture; and
7. An inefficient and uncontrolled traffic pattern throughout the project area.

A realistic general plan buildout alternative would create conditions which would cause environmental impacts greater than those identified in the DEIR for the Diablo Grande project.

With respect to the "Mitigated Project Alternative" as defined on Page VI-9, we object to the description of this alternative as the "mitigated" project alternative. In fact, the Diablo Grande project with the mitigation proposed in the DEIR is a "Mitigated Project Alternative." Identifying the DEIR preparer's Specific Plan Concept as the "mitigated" alternative implies the Diablo Grande Specific Plan with proposed mitigation is not mitigated which is unfairly misleading. In fact, from its inception, the Diablo Grande Specific Plan has integrated feasible mitigation measures into the basic design of the project.

The preparer's approach to alternatives by simply modifying the Specific Plan wrongly applies the alternatives discussion principals, which is to determine whether the proposed project could be more environmentally suitable in another location. The preparer's technique doesn't help much at all to illuminate that concern.

Finally, the mitigated project, as proposed, would not reduce any of the perceived significant unavoidable impacts to significant but mitigable by its implementation. On what basis then is it the "mitigated" alternative?

Please forward these comments to the EIR consultant for incorporation into the Final EIR. In our continuing review of the document, we may determine that additional comments are appropriate, but would not expect them to be as long or detailed as those set forth in this

Mr. Bob Kachel  
October 19, 1992  
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correspondence. If additional comments are made, they will be presented to you in a timely manner, in keeping with CEQA.

Again, thank you for your consideration in this matter, and we will be available to discuss any of these items with you if you feel it appropriate.

Very truly yours,

R. Newman

Russell A. Newman  
Signed in Attorney's  
Absence to Avoid Delay

RAN/dz

cc: Mr. Art Hill

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RESPONSES TO NORMOYLE & NEWMAN OCTOBER 19, 1992 COMMENT LETTER

1. The suggested codes have been incorporated into the Mitigation Monitoring Program.
2. The commenter's opinion is noted. The EIR disagrees with the commenter; the site contains significant open space which would be lost with the development of the project.
3. The EIR does not consider the proposed mitigation measure to reduce the loss of open space below a level of significance. The EIR concurs that maintenance of agricultural zoning on open space areas would reduce impacts on those areas; however the protection afforded by this designation would not substitute for mitigation measures 14 through 26 on pages IV-129 through IV-130 of the EIR. Future development in the open space areas would further degrade its value.
4. Mitigation measure 5 on page II-6 of the EIR is revised to read:

"All interior fixtures and utilities (i.e., water heaters) in public places, and those built into homes by homebuilders, shall be securely attached to reduce the risk of damage or injury from falling objects."
5. Comment noted. Mitigation measure 21, recommend on pages IV-67 and II-8 of the EIR is hereby revised to read as follows (in bold):

"Where corrosive soils pose a threat, underground and subsurface steel and cement structures shall be protected either through the provision of a buffer zone or trench filled with non-corrosive material such as gravel or neutral soil, or the encasement or lining of the underground project improvements."
6. Comment noted. The EIR is maintaining the issues as stated. The cumulative loss of approximately 14,000 acres of habitat for wildlife to development is a significant and unavoidable impact. The enhancement of the riparian corridors and the planting of trees will not provide habitat for most of the larger wildlife species and many small mammal species which will be displaced by the project.
7. The commenter's opinion is noted. The estate lots could potentially adversely affect the biological values of the Conservation Areas.
8. On page II-14 of the EIR, mitigation measure 3 is changed to read as follows:

"The EIR consultant recommends that stream road crossings over major streams (Salado, Crow, and Orestimba creeks) will be made by construction of bridges. Road crossings of minor

streams tributary to these major streams will include either bridges, oversized box culverts, or arched culverts, which require no additional fill beyond placement of the culvert or bridge. The appropriate crossing structure shall be approved ..."

9. The proposed language does not accurately reflect the role of the Department of Fish and Game and Fish and Wildlife Service. The measure as proposed in the EIR is considered to be sufficient to mitigate the impacts of road construction (road kills, barrier to movement). The consultation process with the Fish and Wildlife Service may result in modifications to this measure and the environmental document cannot preclude changes required by the Service.

We do not recommend including the language "... within the mapped kit fox range." This would require conformance with this mitigation throughout the entire project site as the entire site is within the Service's mapped range.

10. Add the following sentence to mitigation 30, page IV-130, line 46 of the EIR: "Ground squirrel control shall occur only in developed portions of any estate lot in the immediate vicinity of houses. If rodent control must ..."
11. The EIR is maintaining the issue as stated. A juvenile prairie falcon was present on the Indian Rocks Park nest site on April 27, 1990. It will be necessary for a qualified wildlife biologist to observe the nest to determine if the nest site continued to be used by prairie falcons. This nest site has been used by raptors for decades as evidenced by the large accumulation of guano and prey remains.
12. Subsurface testing of the cultural resources inside Phase 1 has been conducted for the presence or absence of cultural resources, and in some cases (Phase 1 area and entry road area) to help determine the borders of deposits. The significance of each site has not been evaluated and, therefore, impacts to any of the sites would be considered potentially significant. This work led to the merging of some of the originally discrete resource locations and the elimination of others.

Loci 7 and 9H are expected to be impacted by the development of the Phase 1 area, and therefore specific mitigation measures to mitigate these impacts have been set forth as mitigation measures 7 and 8 on pages IV-162 and IV-163 of the EIR. Nine remaining Loci may be indirectly impacted, and would require monitoring. These Loci would be monitored as set forth in the new mitigation measure 10, as listed below:

For clarity, the cultural resources summary (EIR, pages 19 and 20), is revised to read as follows:

Potential Impact	Mitigation Measures
<ul style="list-style-type: none"> <li>Direct and secondary impacts from grading, excavation, trenching, etc. may impact cultural and historic resources in future phases of development. (SM)</li> <li>Direct and secondary impacts may occur to the following resources due to the development of the Phase 1 area. (SM)</li> </ul>	<p>Prior to approval of future phases of development, and preliminary development plans, a complete evaluation of resources within each development area shall be undertaken and mitigation measures set forth.</p> <p><u>Locus 9H:</u></p> <p>All-standing historic structures shall be preserved. If removal is necessary, treatment shall be recommended by an architectural historian.</p> <p><u>Locus 7:</u></p> <p>Locus 7 shall be preserved as set forth in mitigation measure number 7 on pages IV-162 and 163.</p> <p><u>Loci 10H/11H/12H, 18H, 13, 14 &amp; 15</u></p> <p>Final development plans shall precisely locate these loci, if within 300 feet of any proposed development. These plans shall be reviewed by the Planning Department to determine if any direct or secondary impacts to these resources are likely to occur. If so, an architectural historian, in the case of historic loci, or an archaeologist, in the case of prehistoric loci, shall be consulted, recommendations for protection, salvage, data retrieval, relocation, and/or other appropriate mitigation, of these resources shall be made and implemented. Efforts shall be made to avoid these resources if at all possible."</p>
Historic Resources:	
<ul style="list-style-type: none"> <li>- Locus 9H</li> <li>- Loci 10H/11H/12H</li> <li>- Loci 18H</li> </ul>	
Prehistoric Resources:	
<ul style="list-style-type: none"> <li>- Locus 7</li> <li>- Locus 13</li> <li>- Locus 14</li> <li>- Locus 15</li> </ul>	

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2 It should be noted that it is necessary under CEQA to evaluate the  
3 scientific importance of any resources which may be impacted before  
4 any mitigation measures are devised. Specifically, Appendix K of CEQA  
5 makes the point that a reasonable effort must be made to evaluate  
6 cultural resources according to set criteria before mitigation is devised;  
7 the scientific "uniqueness" or "significance" of the resource has to be  
8 proven if mitigation is to be considered at all. If, for example, a site  
9 does not qualify as significant, there is no further reason to consider  
10 mitigation of impacts to it.

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12 If, however, the cultural resource turns out to be actually significant,  
13 then a range of mitigation recommendations is required, of which  
14 "relocation or preservation" are only two. For prehistoric resources,  
15 mitigation measures may take the form of salvage or archaeological  
16 data from impact areas prior to or during construction, or may take the  
17 form of a simple data retrieval program during construction, which  
18 may be monitored by archaeologists.

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20 A range of mitigation measures is required partly to address the  
21 scientific importance of any single cultural resource, and partly to  
22 factor in the cost of that mitigation to the project sponsor. For  
23 example, agreeing to "avoidance or relocation" could prove to be cost  
24 prohibitive to the project sponsor. Adequate evaluation of any  
25 endangered resource could, however, eliminate the necessity to  
26 provide for any mitigation if the resource does not meet significance  
27 guidelines, or could function to present a more focused mitigation  
28 alternative (focused data salvage or monitoring) for those sites proven  
29 to meet the significance criteria inherent in Appendix K of CEQA.

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31 13. The requested change has been incorporated; the following statement  
32 is added preceding the three mitigation measures on page II-21 of the  
33 EIR:

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35 "Well sites on the valley floor would provide up to 1,200 acre-  
36 feet of water per year to the site, potentially impacting the  
37 aquifer underlying the well site area."

- 38  
39 14. On page IV-204 of the EIR, mitigation measure 1 is revised to read:

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41 "2. Residences shall incorporate energy efficient design  
42 standards in compliance with State and local standards."

- 43  
44 15. Development of the project would have a potentially significant impact  
45 on visual quality affecting the views of future residents and visitors  
46 unless site planning and architectural standards are defined and  
47 implemented. The EIR includes mitigation intended to help define  
48 those standards plus recommends in certain cases the utilization of

photomontage or CAD simulations of proposed development to assure standards would be met.

16. Both statements in the EIR concerning project site acreage of grazing land are correct. As stated on page IV-26, the Phase 1 site includes 1,600 acres of rangeland. The 22,000-acre figure on page IV-26 refers to the overall site excluding Phase 1; the 23,600-acre figure on page IV-31 refers to the overall site including Phase 1.

Page IV-26, lines 10-15 are hereby moved to page IV-31 under the subheading "Impacts to Rangeland and Ranching".

The 359,000-acre figure cited in the EIR page IV-6 represents non-irrigated rangeland. As stated, on page IV-5 and IV-6, the County's irrigated pasture amounts to an additional 75,000 acres located in the San Joaquin Valley.

The 6.5 percent figure cited in the EIR page IV-31 refers to the potential loss of the project site's 23,600 acres of rangeland from the County's inventories of 359,000 acres of non-irrigated rangeland. The EIR determines that the conversion of the site to non-agricultural activities represents a significant impact of the project because of the magnitude of the project's incremental loss of rangeland. This determination does not include economic considerations.

17. Comment noted.
18. Comment noted. The phrase "on a daily basis" on page IV-178, mitigation measure 2, is revised to read "... as determined by the County Department of Environmental Resources, but not less than once a month."
19. The commenter is misinterpreting the intent of Mitigation Measure 1. The measure simply states that the project contribute a "share" proportionate to its effect towards mitigating significant noise impacts. The standards for judging noise impact significance are the criteria specified in the County Noise Element. The EIR has quantified the expected impact magnitude by calculating noise contour distances along major roadways expected to carry project traffic. This is very similar to the procedures by which traffic impacts are mitigated. For example, if two projects are adding equal amounts of traffic to an intersection such that it falls below an acceptable level-of-service, it is usually required that they contribute equal shares toward returning that intersection to an acceptable level of service.
20. Comment noted. The EIR considers this impact to be "significant" because of the quantity and the extent of grading proposed in the Diablo Grande Specific Plan.



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21. Comment and opinions noted.
22. See response to comment 14. above.
23. It is acknowledged that, under the General Plan Buildout Alternative, without clustering, up to 368 septic systems could occur, cattle grazing would continue, site locations/buildings would not be controlled, and roadway locations would not be controlled. However, it is also likely that houses could not be constructed on all of the 160-acre parcels without clustering because of the lack of suitable building sites on many of these parcels. In addition, the project's up to 5,000 residential uses would dwarf the impacts of this alternative on all resource topics.
24. The Mitigated Project Alternative (page VI-9) has been renamed to the "Modified Project Alternative" in recognition that it does not mitigate all project impacts. In addition, the following has been added as the second paragraph on page VI-9 of the EIR:
- "All mitigation measures suggested in the EIR would be applied to this alternative (except measures 14 through 26 on pages IV-129 and IV-130) of the EIR."
- The commenter wrongly asserts that CEQA's alternative requirements apply only to alternative sites to be analyzed in the EIR. Both types of alternatives are appropriate in the EIR.

Mr. Bob Kachel  
Stanislaus County Planning Department  
1100 H St.  
Modesto, California 95350

6 RECEIVED  
OCT 19 1992

Dear Mr. Kachel,

STANISLAUS COUNTY  
PLANNING COMMISSION

Following are my comments regarding the draft Environmental Impact Report for the Diablo Grande specific plan.

In general, I find the EIR to be severely lacking in specificity of impact analysis and related mitigation measures. It should have much greater detail, which would afford interested parties, along with staff and elected officials, the basis for comment on more precise proposed mitigation. Those comments would then elicit responses in the final EIR which could themselves be studied to determine if in fact the consultants/proponents were satisfactorily addressing various parties concerns.

Thus we have a situation here wherein the comments which would normally come during the draft stage will have to wait til the final stage, which means that the public will not have the opportunity to require proponents to address their concerns.

I also note that should this EIR (without a great deal of addition and work) be deemed sufficient analysis of the project when in fact it is inadequate, then future residential projects which come in under the blanket of this "specific plan" will be exempted from their proper and legally mandated review. See CEQA sec. 15182 (a).

References to sections in these comments are references to the guidelines to CEQA, the California Environmental Quality Act.

Section 15126 (c) addresses Mitigation Measures. While the proponents/consultants offer measures related to various impacts, it is generally difficult or impossible to evaluate them for effectiveness and adequacy because they are not yet formulated, but only suggested.

To illustrate, I offer this (partial) list of studies and surveys which are proposed as the first step of "mitigations measures" which would lead to a precise plans of action, which when carried out would theoretically deal with the impact in question. These studies should in fact have already been done so that those specific plans derived from them could be presented in the DEIR as the REAL mitigation measure, for comment, analysis, and if necessary, improvement and further refining. This is from the SUMMARY, beginning on page 11-1.

- \* Geotechnical survey and record search. page 11-1.
- \* Geotechnical evaluation (for grading process). page 11-2.
- \* Grading plan and slope stability analysis. page 11-3.
- \* Interim and Final erosion control plans. page 11-5.
- \* Earthquake emergency plan. page 11-6.
- \* Floodplain studies. page 11-9.
- \* Management plan for replacement of riparian woodland lost to development. page 11-14.
- \* Golf course and landscaping management plans to minimize pollution from fertilizers, pesticides, and grease, oil, and chemicals associated with roads and driveways. page 11-17.

- \* Monitoring program for cultural resources. page 11-20. (This is EXACTLY the type of item that should already be done.)
- \* Final site, landscaping, and grading plans. page 11-24.

Again, these all need to be dealt with, performed, NOW. As I go over the list from the EIR, I am struck by the amount of deferral of study, the off-timeliness of this type of planning procedure, at least according to the letter and intent of CEQA. Saying "We'll figure out later what to do, or even if we have to do it, and that means we've addressed and answered the situation now" is not CEQA. An approval of this EIR as a planning tool for this project would certainly be letting the horse out of the barn, aside from being illegal. I don't mean to say that this inadequate EIR was not well-intentioned, just that it's insufficient, stemming possibly from a very different idea of what the CEQA process is all about.

A few other comments on the summary serve to illustrate this point:

- \* Page 11-6: "If a borrow site must be developed, it shall be located at an environmentally acceptable area..." WHERE is this area? Without knowing that how can it be evaluated?
- \* Page 11-7: "Special engineering procedures shall also be implemented..." What are they? How will they be carried out? What will their effects be?
- \* Page 11-8: "The amount of created impervious surfaces shall be minimized where feasible..." What does that mean? How much? Where? What will be the basis of determining what is necessary minimization?
- \* Page 11-9: "The final project drainage systems shall be designed to ensure no net increase in 100-year storm flows downstream of the site." What exactly IS the system- sites, slopes, amounts handled, where does it interface with natural waterflows, etc.?
- \* "Project runoff from developed areas shall be directed towards the appropriate collection basin." What is the choice of basins, what is their impact in their specific area and how is that mitigated, if necessary? How much flow, what's the potential pollutant content, etc.?
- \* Pages 11-11 and 11-12. Regarding the use of chemicals on the golf courses- what types, used where, how much, what effects are expected, how can they be minimized and mitigated, etc. I note there are descriptions of how this type of study is to proceed, but in such fashion there may well not be occasion for public involvement and scrutiny. A lot needs to be spelled out now.
- \* Page 11-15: "Trails should be carefully planned to avoid areas of high wildlife use." Where will they be? What are the parameters for determining high wildlife use? Who determines it?
- \* Same page: "Restrictions on the number and location of livestock shall be implemented to prevent overgrazing in open space areas." What are the restrictions? How can effectiveness be evaluated if specifics are not known? Without determining effectiveness, how do we know if a mitigation measure is adequate or not? (This relates to most of my comments on the mitigation measures.)
- \* Page 11-17: "Avoid areas where plant and wildlife species of special concern are located where possible...and develop specific mitigation measures where avoidance is not possible." This is a very clear instance of the misunderstanding of CEQA. A mitigation measure is NOT the stipulation of a future mitigation measure. NOW is the time for the mitigation measures to be presented. Who determines whether or not avoidance is possible? How do they do so? All of this must have public scrutiny.
- \* Page 11-18: "Where riparian habitat is unavoidably disturbed or lost

in like amount." What areas, how determined, by whom? What are the "rehabilitation" specifics? Where will habitat be replace? What is the cost?

\* Page 11-20: " Long-term environmental impacts of the Yuba water diversion and storage at Madera Ranch shall be studied prior to approval of those supplies." THIS is the time for their study. Approval by whom? How will it be studied? The intent of CEQA is not just study- it is analysis and mitigation- or possible denial if that is not possible.)

\* Page 11-21: The first paragraph deals with monitoring wells and contains a lot of "shoulds" and "coulds". These need to be "shalls" and "wills". This is also too imprecise to evaluate.

\* Page 11-22: "Sludge produced by the water treatment and sewerage treatment plants shall be contained, handled, and disposed of properly to avoid soil or groundwater contamination." What does "properly" mean? How will it be handled? Where disposed of? What would it likely contain?

\* Page 11-23: Regarding public services: What are the developer fees for police and fire services, or the facilities in lieu of fees? How much, how derived, etc.? Will they be adequate? Hospitals: The EIR should read "The applicant and the Patterson Hospital District SHALL negotiate ..." Schools: What would the developers fees be, how much and how derived, and what would the "additional funding mechanisms" be? The public needs to evaluate this.

Parks and recreational areas: What, where, how funded, how large, etc.? This all needs public review, and in this EIR.

\* Page 11-26: "Diablo Grande shall contribute proportionately to the following improvements: " What does "proportionately" mean? Who determines that and how? Relative to what else? Based on what?

\* Page 11-27: On-site circulation: here again there is no plan to evaluated, only suggestions that would lead to one. Without specifics, the effectiveness of the mitigation is open to questions of adequacy.

On page IV-72 it states there are no plans for the distribution of reclaimed water to the entire site. I would certainly encourage this, as a way to decrease overall water consumption. Los Angeles and many other areas have had great success with this way of extending water supplies and technologies and methods are available to do so. The EIR also states there are "plans" for Phase 1 (for distribution of reclaimed water). Where and what are they?

Regarding the Air Quality aspects of the project and the EIR: As noted in the EIR, of course the emissions from the project would serve to increase the levels of NOx and ROG in an area already in non-attainment status for these two pollutants, as well as for carbon monoxide and PM10. The California Clean Air act contains provisions which require such areas to achieve a reduction of 5 per cent or more per year for each nonattainment pollutant. This project will work directly against such goals, as it will add to the problem rather than improving it. Of course, this project is not unique in that respect. However, that also does not excuse this project, nor those with jurisdiction over it, from complying with the law regarding air pollution. In addition to legal aspects of air pollution there are health and other factors to consider. With that in mind, and speaking on behalf of the Valley Air Trust, Inc., I would suggest that the EIR contain the following: A listing of the effects and costs of the air pollution from the project on:

- a) Human health
- b) Animal and wildlife health
- c) Crop production, and

These costs having been established, there should be a means of mitigating them through a payment or funding plan, an offset program, or some other means. This requirement may seem extravagant, but the effects are real, they are quantifiable, they must be dealt with and they have been validated. Information and study in this area continues to increase. We must deal not only with the effects of air pollution but the causes and thereby avoid suffering from the effects.

The air quality situation has reached a point where fugitive emissions from the valley are now a major factor in determining the status of four adjacent mountain counties (Tuolumne, Calaveras, Mariposa, and Alpine) causing them to be considered to be listed as in non-attainment for ozone. Such a listing, which will be determined on December 10th by the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) would mean that these counties would have to implement certain control measures now in effect in the Central Valley. Thus the pollution continues to spread and in a very real sense we all become more linked in our (counties') relationships and effects on each other, making each project and its impacts even more crucial. One the size of Diablo Grande simply must mitigate its impacts, or the quality of life it supports to offer its potential residents (as per an offering brochure put out by DVG Ltd. Partnerships) will not be available to them or anyone else in the surrounding area.

One final comment on air quality: On page IV-297, the fourth paragraph down states: "Potential toxic and odor emissions from the on-site Research Campus and from any remaining agricultural uses could be carried toward Diablo Grande residential areas by the local winds. Emissions of toxic air pollutants and odors, if they occur, would have significant adverse impact on on-site residential areas." I could not find a mitigation measure which addressed this in the mitigation section, and there certainly must be one, as this seems to be a real potential health threat to certain residents.

Finally, I note the lack of a monitoring program. The Public Resource Code section 21081.6 states "...the public agency shall adopt a reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoided significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation."

My intention in participating in the planning process is to help insure wise planning that provides for sustainable use of resources, without which the support system for us all here in the valley will break down. Indeed, in many areas it already has. Good planning is thorough and timely and as all-inclusive as possible. CEQA does much to provide us with a framework for good planning and it must be adhered to, in spirit and letter.

This EIR is broad but not complete- it uses broad brush strokes where fine detail is called for. It omits a great deal in its addressing of the environmental impacts of this project. Its mitigation measures to a large extent are more directions and intentions rather than actual plans. Studies, analysis, and data are lacking. All of this and more must be compensated for if this document is to be determined adequate and legal.

CEQA section 15151: An EIR should be prepared with a sufficient degree of analysis to provide decisionmakers with information which enables them

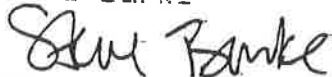
consequences. ...the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

I would refer to section 15370 for definitions of mitigation measures and note the following from the court case (Laurel Heights Improvement Association of San Francisco v. Regents of the University of California (1988) 47 Cal.3d 376, 407 [253 Cal.Rptr.426]): "For projects for which an EIR has been prepared, where substantial (emphasis mine) evidence supports the approving agency's conclusion that mitigation measures will be effective, courts will uphold such measures against attacks based on their alleged inadequacy." There is without question an insubstantial amount of evidence presented on the Diablo Grande project to warrant approval of the EIR and advancement of the project through the process."

I look forward to examining such further evidence in the final EIR, to responses to the comments of myself and others. I appreciate the opportunity to participate in the planning process and thank you for that.

Sincerely,

Steve Burke



President, Valley Air Trust, Inc.  
President, Ecology Action  
Vice-president, Land Utilization Alliance.

**RESPONSES TO STEVE BURKE OCTOBER 19, 1992 COMMENT LETTER**

1. See response to comments 6 and 7 of the San Joaquin County Community Development Department October 1, 1992 comment letter.
2. Comment noted. See response to comment 7 of the San Joaquin County Community Development Department October 1, 1992 comment letter.
3. See response to comment 8 of the Patty Hobbs, Environmental Consulting October 15, 1992 comment letter.
4. Comment noted. It is very unlikely that a borrow site will be necessary during project grading, as the project proposes to balance grading within each subphase.
5. The "special engineering procedures" to be used in the construction of roadways to protect against liquefaction damage, as is stated in mitigation 18 on pages IV-66 and II-7 of the EIR, may include the support of the roadway via retaining walls and/or the overexcavation of the proposed roadways and replacement with stable material. Drainage facilities would need to be provided where necessary.
6. During preparation of the final development plans, the area of impervious surfaces can be reduced through incorporation of permeable building material where possible (such as turf blocks for residential driveways and common areas within commercial areas) and/or the substitution of landscaped areas for otherwise paved areas within the more intensively developed areas of the Specific Plan, such as the town center and hotel conference center. Incorporation of these measures would reduce the size of on-site stormwater detention area necessary to accommodate the 100-year storm.
7. The overall site drainage system as well as the detailed Phase 1 drainage system are described in the Hydrology and Water Quality section of the report (pages IV-68 through IV-96). Figure IV.C-3 specifically outlines the features of the proposed Phase 1 drainage system. The figure indicates the location and size of all drainage pipelines, open channels, box culverts and ponds.
8. Comment noted. The Preliminary Storm Water Management Study prepared for Phase 1 by Rochester & Associates, Inc. (Rochester & Associates, March 1992) included a figure delineating Phase 1 sub-basins in both pre- and post-development states. This figure is provided on the following page for the readers' information and for clarification of the following discussion.

The quantity of expected runoff from each subbasin was estimated assuming development of the various Phase 1 land uses. These

# Diablo Grande

A Planned Residential  
& Resort Community

Oak Flat Road  
Stanislaus County, California

Phase 1

Preliminary Development Plan  
Oak Flat Village 1

## Drainage System

### Legend

- Inlet Structure
- Outlet Structure
- 24" 36" Drainage Pipeline
- Open Channel
- || Culvert

Figure 3

Base Map Source  
Bookman-Edmonston Engineering, Inc.  
Glendale, California

September 1991

- (E) EXISTING BASIN
- - - - - POST DEVELOPMENT BASIN
- POND A - D

APPENDIX A-6

Rochester & Associates, Inc.

Charters On Green  
625 Green Street, N.W.  
Gainesville, Georgia 30501  
Atlanta (404) 577-4432  
Gainesville (404) 534-5106

PRELIMINARY  
STORM WATER MANAGEMENT STUDY FOR  
DIABLO GRANDE PHASE I

MARCH 1992



# EXHIBIT 1

## RUNOFF PARAMETERS FOR DEVELOPED CONDITIONS

### DIABLO GRANDE PHASE I - HYDROLOGIC ANALYSIS

LAND USE	% IMPERVIOUS	BASIN A		BASIN B		BASIN C		BASIN D		PHASE I TOTAL	
		AREA (AC.)	IMP. AREA (AC.)	AREA (AC.)	IMP. AREA (AC.)	AREA (AC.)	IMP. AREA (AC.)	AREA (AC.)	IMP. AREA (AC.)	AREA (AC.)	IMP. AREA (AC.)
RESIDENTIAL											
Multiple Family (MF)	65	0.0	0.0	0.0	0.0	9.0	5.9	19.0	12.4	28.0	18.1
Att. Single Fam. (ASF)	65	14.0	9.1	0.0	0.0	38.0	24.7	8.0	5.2	60.0	39.0
"0" Side Yd or "2" lots	60	6.0	3.6	0.0	0.0	16.0	9.6	3.0	1.8	25.0	15.4
Single Family (SF)											
(R-1 - 10,000 sf)	35	39.0	13.7	29.0	10.2	13.0	4.6	59.0	20.7	140.0	49.0
(R-1 - 20,000 sf)	25	95.0	23.8	69.0	17.3	31.0	7.8	145.0	36.3	340.0	85.0
(R-1 - 40,000 sf)	15	25.0	3.8	18.0	2.7	8.0	1.2	39.0	5.9	90.0	13.5
EMPLOYMENT AREAS											
Shop., Town Ctr., Rest.	70	3.0	2.1	0.0	0.0	20.0	14.0	0.0	0.0	23.0	16.1
Hotel	60	0.0	0.0	0.0	0.0	13.0	7.8	0.0	0.0	13.0	7.8
Golf, Health & Tennis	50	0.0	0.0	0.0	0.0	4.0	2.0	0.0	0.0	4.0	2.0
Minery	50	0.0	0.0	0.0	0.0	3.0	1.5	0.0	0.0	3.0	1.5
Public Facilities	60	0.0	0.0	4.0	2.4	4.0	2.4	0.0	0.0	8.0	4.8
ROAD SYSTEM											
Parkway	75	14.0	10.5	11.0	8.3	14.0	10.5	23.0	17.3	62.0	46.5
Collector Streets	65	17.0	11.1	13.0	8.5	16.0	10.4	27.0	17.6	73.0	47.5
Cul de Sacs	60	9.0	5.4	6.0	3.6	3.0	1.8	13.0	7.8	31.0	18.6
OPEN SPACE & UNDISTURBED	0	1435.0	0.0	2340.0	0.0	715.0	0.0	4960.0	0.0	9450.0	0.0
-----											
TOTAL PHASE I (IMPERVIOUS)	41	222.0	82.9	150.0	52.8	192.0	104.1	336.0	124.7	900.0	364.5
TOTAL WATERSHED - PHASE I		1657.0	82.9	2490.0	52.8	907.0	104.1	5296.0	124.7	10350.0	364.5
-----											
RATIONAL CURVE NUMBER		67		66		69		66			
((UNDEV. AREA * 65)+(IMP. AREA * 98))/TOTAL WATERSHED											

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calculations are provided in the table on the page following the drainage basin map. These calculations were used in a computer model which assessed the adequacy of the proposed drainage system design. Based on this review, the sizes and locations of the four stormwater detention ponds were determined.

A quantitative study of the expected urban pollutant load expected to be contained in each subbasin surface runoff was beyond the scope of the EIR. The potential impacts of urban pollutants that would be generated from Phase 1 development were discussed on pages IV-87 and IV-88.

9. The following information has been added to page IV-80 of the Hydrology and Water Quality section of the EIR in response to comments requesting additional information on golf course chemicals.

#### *Golf Course Chemical Usage*

Typical golf course management practices, including fertilizer, herbicide, fungicide, and insecticide use, can result in adverse water quality impacts. The golf course areas which require greater maintenance include tees, greens, landing areas, fairways, and aprons. Golf course roughs, however, which occupy the greater acreage, often employ native and other meadow grasses which have lower fertilization and pesticide requirements.

#### *Fertilizers and Pesticides*

**Background.** Fertilizers supply those essential nutrients which are used in large amounts and which are deficient in most soils. Elements which are normally applied in a turfgrass fertilization program are nitrogen, phosphorous, and potassium. Fertilizers are generally applied to only the greens, tees, fairways, and part of the roughs of a golf course. The fertilization schedule depends on the soil and turf needs, time of year, type of fertilizer, and irrigation practices and can vary greatly between golf courses.

The potential for surface and groundwater contamination on and near the project site will be a function of the types and amounts of fertilizers and pesticides used, the timing and location of the applications, and related weather conditions (temperature, wind, rainfall). The common causes of surface and groundwater contamination from golf course fertilizers and pesticides are: (a) excessive application; (b) application at the wrong time, i.e., at dormant (cold) periods when plants are unable to use the nutrients, or during periods of high runoff and surface/groundwater flow periods; (c) application too close to surface waters; and (d) use of highly soluble fertilizers. Federal, state, and local laws require that any fertilizer or pesticide materials used in maintaining the golf course be

1 federally approved for such use (i.e., approved by the U.S.  
2 Environmental Protection Agency). The use of RUPs requires a certified  
3 applicator.  
4

5 **Fertilizers.** Golf course grasses and other plants are less able to use  
6 fertilizer nutrients during periods when the soil is too cold and the  
7 plant metabolism too slow. Fertilizer application during such cold  
8 periods can result in nutrients reaching groundwater sources or nearby  
9 drainages and ponds before being absorbed by the golf course plants,  
10 resulting in water quality impacts. Fertilizer application during periods  
11 of high stormwater runoff can result in similar problems. Fertilizers  
12 applied too close to surface drainages and ponds may reach these  
13 waters before being absorbed by the golf course plants. Excessive use  
14 of fertilizers, or the use of highly soluble fertilizers, can also contribute  
15 to this problem, producing a short-term excess of nutrients which can  
16 enter project streams and ponds via runoff or groundwater. Excessive  
17 amounts of fertilizer in water bodies can affect the eutrophication  
18 levels (available oxygen necessary for aquatic life) and exceed the safe  
19 drinking water standard levels. Pesticides are normally applied only in  
20 response to specific problems. There are few instances in which  
21 pesticides are applied in a regularly scheduled, preventative program.  
22

23 The three general types of weed, pest, and disease-control chemicals  
24 used on golf courses are herbicides, insecticides, and fungicides.  
25 Herbicides are chemicals which are applied to control undesirable  
26 plants such as weedy grasses (crabgrass, goosegrass, etc.). Insecticides  
27 are chemicals which are applied to control undesirable insects such as  
28 mites and thrips. Fungicides are applied to control rust, mildew, and  
29 other fungi. Basically, herbicides are used most frequently followed by  
30 insecticides and fungicides. In addition, nematocides are pesticides  
31 specially designed to control nematodes which have been an  
32 intermittent problem in the western United States. The types of  
33 chemicals and usage rates vary widely depending on disease problems,  
34 the type of grass, soil properties, rainfall, irrigation practices, and time  
35 of year. The bulk of herbicides used for both prevention and  
36 eradication of weeds are applied to fairways while insecticides and  
37 fungicides are applied as spot treatments and then only on an "as  
38 needed" basis.  
39

40 The chemistry for each pesticide is different and affects the way it  
41 behaves in the environment as well as how it affects non-target  
42 organisms. Many of the pesticides have a strong binding ability to soil  
43 organic matter, which reduces the potential to leach into groundwater  
44 but leaves a relatively high potential to contaminate surface water  
45 through runoff. Pesticides designed for rapid degradation minimize  
46 this impact. Toxicity to fish and wildlife varies between products.  
47

48 The Environmental Protection Agency (EPA) is responsible for  
49 registration of pesticides. In addition to basic studies on toxicology,

1 efficacy and chemistry. EPA also requires extensive environmental fate  
2 studies. There are approximately 886 pesticides that are approved for  
3 use by the EPA. At the time of registration (or re-registration) EPA is  
4 required to identify those chemicals which can cause unreasonable  
5 adverse effects to the environment or humans. Products containing  
6 such chemicals are classified as Restricted Use Pesticides (RUPs).  
7 Applicators who use RUPs are required to be certified to work under  
8 the direct supervision of one who is certified.  
9

10 Excess amounts of standing water such as ponds, lakes and streams  
11 which are often incorporated into golf course designs may increase the  
12 need for on-site pesticide use to control mosquitos. Depending on the  
13 type, application rate, and site-specific particulars, if not properly  
14 controlled, it is possible that some of the pesticides used on site could  
15 enter the Salado Creek watershed and would have to be carefully  
16 monitored and controlled.  
17

18 **On-Site Impacts.** Potentials for contamination of surface and  
19 groundwater would be highest at the "highly managed" portions of the  
20 golf course, i.e., the greens and tees areas. These areas would be  
21 subject to the highest levels of fertilization and pesticide use. These  
22 areas may also be underlain by introduced sandy soils which would  
23 require more frequent watering and fertilization. The potential for  
24 significant nitrate and pesticide leaching and surface water  
25 contamination impacts will be highest in the rainy months, particularly  
26 when a significant rainfall (one to two inches) occurs within several  
27 days of applying a highly soluble nitrogen source. The potential for  
28 contamination of surface and groundwater could also increase without  
29 incorporation of safe handling and storage procedures for golf course  
30 chemicals and the proper maintenance of applicator equipment.  
31

32 At this stage of project development, a detailed golf course design has  
33 not been established. Typical golf course design features that can limit  
34 these impacts would be the minimization of high maintenance and  
35 standing water areas, incorporation of perimeter turfgrass areas which  
36 are highly effective in impeding surface runoff and possible nitrate and  
37 pesticide loads, and the provision of buffers between the golf courses  
38 and surrounding land uses. The retention of natural vegetation can  
39 serve to further impede golf course runoff. Once detailed, a golf  
40 course plan has been established, various golf course areas (tees,  
41 greens, fairways, etc.) delineated, and species of grasses chosen, a golf  
42 course risk assessment and formulation of a golf course management  
43 program should be prepared. This site-specific study and program  
44 could accurately define the potential issues and impacts of the  
45 proposed golf course in the Diablo Grande Specific Plan and provide  
46 appropriate mitigation measures and safe management practices to  
47 minimize impacts to water quality, both on-site and off-site.  
48

1 The commenter's request for public participation in the planning  
2 process of the golf course studies is noted. However, the involvement  
3 of the public in that aspect of the site planning process is not a CEQA  
4 issue.

5  
6 10. Refer to mitigation measure 8, page IV-127. The EIR identifies areas of  
7 high wildlife use for Phase I, which includes the prairie falcon eyrie,  
8 the Salado Creek corridor areas of oak woodland, and the rock  
9 outcrops in the Indian Rocks Park area. The general language in this  
10 measure is intended to guide planning for the remainder of the  
11 property and is to be based on the results of biological studies  
12 conducted for these areas.

13  
14 11. Refer to mitigation measure 7, page IV-126. Add the following  
15 sentence at the end of mitigation measure 7: "Carrying capacity should  
16 be determined by a qualified range management specialist and could  
17 not be exceeded."

18  
19 12. This measure is intended to guide site planning for the overall site  
20 outside of Phase I. These areas have not been surveyed in detail and  
21 specific biological information is not currently available. These surveys  
22 will need to be conducted as part of the environmental review process  
23 for the subsequent phases of the development and their results used  
24 in the site planning process. The measure on page II-17 should be  
25 revised to read:

26  
27 "Avoid areas where plant and wildlife species of special concern  
28 are located, such as in the vicinity of the prairie falcon eyrie,  
29 and develop specific mitigation measures where avoidance is  
30 not possible. Surveys for the potential presence of species of  
31 special concern will be required for the remainder of the site  
32 outside of Village 1 prior to the environmental review process  
33 for each village.

34  
35 13. Refer to mitigation measures 2 and 3, page IV-126.

36  
37 14. See response to comments 3 and 5 in the Stanislaus Natural Heritage  
38 Project October 19, 1992 comment letter.

39  
40 15. The "shoulds" and "coulds" in the mitigation measures will be changed  
41 to "shalls" and "wills" when mitigation measures are adopted as  
42 conditions of project approval.

43  
44 16. See response to comments 9, 18, and 22 in the Stanislaus County  
45 Department of Environmental Resources comment letter, and comment  
46 22 of the Thomas Reid Associates October 16, 1992 comment letter.

47  
48 17. Developer fees for public services, including police and fire protection,  
49 will be determined through discussions between the applicant and the

appropriate public agency, as outlined in mitigation measure 3 on page IV-188 and the mitigation measure on page II-23. The proposed project will not be approved by the County until developer fee contributions, provision of facilities in lieu of fees, or existing public services have been determined to be adequate.

The third bulleted mitigation measure on page II-23 has been revised in response to comment 2 of the Henn, Etzel and Mellon October 16, 1992 comment letter.

Fee payments for public services are intended to offset the incremental increase in service costs due to the proposed project. For example, if the proposed project combined with the Lakeborough project results in the need for a new fire station to serve both project sites, both projects shall pay for the new station. If the new station is planned to devote 80 percent of its resources to providing service to the Diablo Grande site and the remaining 20 percent to the Lakeborough site, then the Diablo Grande project should pay for 80 percent of the cost of the new station. This is known as the "proportionate share contribution". In another example, if there is a need to widen Interstate 5 in Stanislaus County it will be do, in part, to the proposed project. However, concurrent growth in other areas of the County contributes to the need for circulation improvements. The proposed project, although a contributor, cannot be expected to accept full financial responsibility for widening Interstate 5. Rather, the proposed project shall fund a "proportionate" share. The County or applicable public agencies will determine the "proportionate" share to be paid by the proposed project for improvements to public services.

As with developer fees, dedication of parks and recreation areas will be determined through discussions between the applicant and the appropriate public agency.

18. See response to comment 17 of this letter.
19. The Consultant agrees that a more refined plan is needed to adequately address on-site traffic impacts and mitigation measures. However, as discussed in response to comment 5 of the Stanislaus County Department of Public Works October 16, 1992 comment letter, roadways and intersections should be designed using County and, if appropriate, Caltrans design standards.
20. The applicant is investigating potential use of reclaimed water for the winery, golf courses, and parks. See also response to comment 19 of the Stanislaus County Department of Environmental Resources comment letter.
21. On page IV-297, lines 4-5, the EIR notes that project emissions would have a significant impact on ozone levels. This impact would not be

1 limited to the immediate site environs. The EIR subsection  
2 "*Meteorological Influences on Air Quality*" notes that the presence of  
3 a regional temperature inversion during the summer months can have  
4 a adverse influence on air quality throughout northern California.  
5 Also, the EIR subsection "*Air Quality Problems in the San Joaquin*  
6 *Valley*" notes that ozone problems in the San Joaquin Valley are caused  
7 by many sources of ozone precursors located throughout the Valley.  
8 The project site is in the San Joaquin Valley air basin and pollutants  
9 emitted there can effect those portions of the air basin downwind (i.e.,  
10 to the south and east).

11  
12 On page IV-290, lines 33-34, the EIR notes the Valley's non-attainment  
13 status with respect to state and/or federal ozone, CO, and PM<sub>10</sub>  
14 standards.

15  
16 On page IV-289, lines 19-20, the EIR noted the five percent annual  
17 reduction of air pollutant emissions required by the California Clean  
18 Air Act (CCAA).

19  
20 The AQAP estimates a 30 percent decrease in ozone precursor  
21 emissions by the year 2000, even with the projected 29 percent  
22 population growth and 35 percent employment growth in the San  
23 Joaquin Valley, if all the control measures proposed by the AQAP are  
24 fully implemented. The project's increment to the Valley's population  
25 and employment base will not, by itself, invalidate the estimates which  
26 underlie the AQAP. Thus, implementation of the project would not  
27 necessarily halt or slow progress toward standard attainment. It must  
28 also be mentioned that the AQAP, in its present form, makes no  
29 predictions as to when such standards would be attained Valley-wide.

30  
31 On page IV-292, lines 1-7, the EIR discusses ozone damage thresholds  
32 for crops and natural vegetation.

33  
34 22. The AQAP mandates the development of a New and Modified Indirect  
35 Source Review Rule. This Rule would require project applicants to  
36 mitigate or offset emissions of ozone precursors from indirect sources  
37 or payment of a mitigation fee to fund emission reduction programs.  
38 The project would be a major indirect source and would almost  
39 certainly come under its provisions once it is adopted. But on page IV-  
40 298, lines 4-26, the EIR outlines some, if not all, of the TDM measures  
41 that probably would be required by such a Rule.

42  
43 23. The project's ozone precursor emissions would not necessarily remain  
44 in the immediate site environs. The project site is in the San Joaquin  
45 Valley air basin and pollutants emitted by the project could be carried  
46 to downwind portions of the air basin (i.e., south and east). But  
47 implementation of the project would not necessarily halt or slow  
48 progress toward Valley-wide standard attainment, because the project's  
49 increment to the Valley's population and employment base will not, by

1                   itself, invalidate the estimates which underlie the AQAP. The 30  
2                   percent reduction in ozone precursor emissions estimated by the AQAP  
3                   could still occur with project development.  
4

5                   24. Mitigation measure 3 on page IV-298 of the EIR is intended to mitigate  
6                   air toxic emissions by the project.  
7

8                   25. A Mitigation Monitoring Program will be submitted to the County prior  
9                   to issuance of any residential building permits. The program will  
10                  describe the timing and parties responsible for implementing all  
11                  mitigation measures included in the EIR, per AB 3180 requirements.  
12

13                  26. Comment noted.  
14

15                  27. Comment noted. The Board of Supervisors would be required to  
16                  prepare findings regarding mitigation if they choose to approve the  
17                  proposed project.  
18



**Comments of  
Plumbers and Steamfitters U.A. Local 437**

**on the**

**Diablo Grande Specific Plan  
Draft Environmental Impact Report**

**RECEIVED**  
OCT 19 1992

**STANISLAUS COUNTY  
PLANNING COMMISSION**

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October 19, 1992

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Re: DRAFT ENVIRONMENTAL IMPACT REPORT - DIABLO GRANDE

Dear Mr. Freitas:

The following comments on the Diablo Grande Specific Plan Draft Environmental Impact Report ("Draft EIR") are submitted on behalf of Plumbers and Steamfitters UA Local 437 and its members. This letter examines the analysis presented in the Draft EIR in relation to the legal standards and requirements of the California Environmental Quality Act ("CEQA"). The attached letter prepared by Dr. Karen Weissman and Tay Peterson of Thomas Reid Associates, an environmental planning and consulting firm, evaluates the Draft EIR's analysis of the technical and substantive issues raised by the proposed project.

Local 437 represents members who live and work in Stanislaus and Merced Counties. As local residents, these members will be affected by the air quality, traffic, public service and other environmental and health and safety impacts of the project. Local 437 and its members have a direct interest in ensuring that such impacts are thoroughly considered and addressed.

We live in an era in which growth and development are limited by natural systems, inadequate public services and infrastructure, regulatory restrictions and political pressures. Although Local 437 generally supports responsible development, the organized construction trades are increasingly concerned that poor planning and environmental degradation are jeopardizing future construction jobs by undermining opportunities for sustainable growth. For this reason, Local 437 also believes it important that proposed development projects, particularly

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projects of this magnitude, be carefully planned and environmentally responsible.

The Draft EIR prepared for Stanislaus County on the Diablo Grande project falls far short of the legal requirements for an adequate environmental review under CEQA. As discussed in detail in the comments that follow, the Draft EIR fails to include a clear and complete description of the project, fails to adequately address the potential direct, indirect and cumulative impacts of the project and fails to properly identify and evaluate mitigation measures and alternatives necessary to avoid or lessen the significance of potential impacts.

These deficiencies in the analysis result in a document that as a whole fails to comply with the informational objectives of CEQA. The significant additional information and analysis that must be added to the document to conform to CEQA requirements and to respond to these comments will require recirculation of a new Draft EIR.

I. PROJECT DESCRIPTION IS AMBIGUOUS AND INCOMPLETE

The definition of the project under review in an EIR is critically important since it informs the public and government decision-makers of the nature of the proposed activity and determines the scope and content of the analysis that follows. In this case, the activities intended to be covered by the project definition are not clearly identified, and the project components discussed are not adequately or completely described. This defective project description undermines every element of the environmental evaluation.

The courts have declared that "[a]n accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR." (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App. 3d 185, 193, [139 Cal.Rptr. 396, 401]; see also *City of Santee v. County of San Diego*, 214 Cal.App.3d 1438 [263 Cal.Rptr. 340], *Rural Land Owners Association v. Lodi City Council* (1983) 143 Cal.App.3d 1013, 1024-1025 [192 Cal.Rptr. 325, 332-333] and *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3d 818, 829-830 [173 Cal.Rptr. 602, 608].)

The CEQA Guidelines also require that a project definition include: "the whole of the action, which has a potential for resulting in a physical change in the environment, directly or ultimately. . . ." (14 C.C.R. § 15037, subd. (a); See *City of Santee v. County of San Diego*, *supra*, 214 Cal.App.3d at pp. 1450-

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1455 and *Rural Landowners Association v. Lodi City council*,  
*supra*, 143 Cal.App.3d at p. 1025.)

The policy behind the requirement for a clear, accurate and complete project definition was cogently stated in *County of Inyo v. City of Los Angeles*, *supra*, 71 Cal.App.3d at p. 193: "A curtailed or distorted project description may stultify the objectives of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the 'no project' alternative) and weigh other alternatives in the balance." (See also *City of Santee v. County of San Diego*, *supra*, 214 Cal.App.3d at pp. 1450-1455.)

The project at issue in *County of Inyo* was a proposed increase in groundwater pumping from the Owens Valley aquifer for export to Los Angeles. (*County of Inyo v. City of Los Angeles*, *supra*, 71 Cal.App.3d at pp. 194-195.) The City's EIR, however, initially described the project to include only the pumping of additional groundwater for use on City-owned lands in Inyo and Mono Counties, although later sections of the report considered the groundwater pumping as part of the city's larger water supply system. (*Id.*, at pp. 190-191.).

The court concluded that the ambiguous project definition frustrated the public informational goals of CEQA and undermined the ability of the public and government agencies to present meaningful comments on the Draft EIR. The court found that "[t]he incessant shifts among different project descriptions . . . vitiates the City's EIR process as a vehicle for intelligent public participation." (*County of Inyo v. City of Los Angeles*, *supra*, 71 Cal.App.3d at p. 197.) The court added that "[a] curtailed, enigmatic or unstable project description draws a red herring across the path of public input." (*Id.*, at 198.)

In *Santiago County Water District v. County of Orange*, *supra*, 118 Cal.App. 3d 818, the court considered a challenge to an EIR on a proposed sand and gravel mining operation. Although the sand and gravel mining project would require service by new off-site water supply facilities, the EIR had not included the construction of additional water facilities in the project description.

The Santiago court concluded that the inaccurate project definition rendered the EIR invalid since not all significant environmental effects had been considered. The court noted that "[t]he construction of additional water delivery facilities is

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undoubtedly one of the significant environmental effects of the project." (*Santiago County Water District v. County of Orange*, *supra*, 118 Cal.App. 3d at p. 829).

The court also concluded that the exclusion of the water facilities from the project description misled the public and government decision-makers regarding the full scope of the proposal: "Because of this omission, some important ramifications of the proposed project remained hidden from view at the time the project was being discussed and approved. This frustrates one of the core goals of CEQA." (*Santiago County Water District v. County of Orange*, *supra*, 118 Cal.App. 3d at p. 830.)

In *Rural Land Owners Association v. Lodi City Council*, *supra*, 143 Cal.App. 3d 1013, the city considered a general plan amendment necessary to allow development on certain agricultural lands within the City's sphere of influence. However, the EIR described the project to include only the general plan amendment, and excluded the proposed annexation and development of the property as unrelated projects. (*Id.* at p. 1021.)

The court held that the City's restricted project definition defeated CEQA's mandate for public disclosure and full consideration of project impacts. (*Rural Land Owners Association v. Lodi City Council*, *supra*, 143 Cal.App.3d at pp. 1024-1025.) The court declared that "[r]esponsibility for a project cannot be avoided by limiting the title or description of the project." (*Id.* at pp. 1022-1023.)

The initial problem with the Diablo Grande project definition is the ambiguous description of the actions covered by the EIR. The Draft EIR claims to present a "program-level environmental analysis of the Specific Plan as well as a project-level analysis of the proposed Phase 1 development." (Draft EIR, p. I-2.) However, in listing the project approvals that would be supported by this EIR, the report includes a General Plan Amendment, rezoning, adoption of a Specific Plan, adoption of a Preliminary Development Plan for Phase 1, adoption of a Development Agreement, cancellation of Williamson Act contracts and approval of subdivision maps. (Draft EIR, p. III-31.)

The Draft EIR also indicates that a number of other approvals may be required for the project, including permits from the California Department of Fish and Game ("CDFG"), the U.S. Army Corps of Engineers, the Local Agency Formation Commission ("LAFCO"), the Board of Supervisors and other agencies. (*Ibid.*)

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It is not clear from this discussion whether the program-level review is intended to address the General Plan Amendment and rezoning as well as the Specific Plan adoption. Even more uncertain is whether the project-level review of the Phase 1 development is intended to include the Williamson Act cancellations, subdivision map approvals and Development Agreement adoption in addition to approval of the preliminary development plan. It is also unclear whether the Draft EIR is intended to serve as the environmental documentation for other approvals that may be necessary for the project. If so, is the Draft EIR intended to address the other approvals for the project as a whole, or only for Phase 1?

Assuming the project definition is intended to include the General Plan Amendment and rezoning, the description of these components of the project is far from adequate. The Draft EIR simply notes that the project would designate the project area as "Specific Plan" with "underlying or combining General Plan designations for specific land use types." (Draft EIR, p. I-1.) The rezoning action would similarly classify the area as "Specific Plan" with "underlying or combined zoning classifications based on districts contained in the Stanislaus County Zoning Ordinance as modified by the Specific Plan. (Ibid.)

2  
(p. 11)

The Draft EIR does not discuss whether any changes to the General Plan text or maps are proposed or will be required. It does not discuss any revisions in General Plan goals, policies or implementation measures. It fails to provide any meaningful description of the zoning code revisions. The nature of the General Plan and zoning proposals are not described in sufficient detail to allow for meaningful public review.

Even more troubling is the lack of information provided on the Diablo Grande Specific Plan, which is clearly included in the project definition and is the primary focus of the program-level review. At a minimum, a Specific Plan must specify in detail, the distribution, location and extent of proposed land uses, the distribution, location, extent and intensity of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other facilities necessary to support the proposed land uses, the standards and criteria by which development will proceed, standards for the conservation, development and utilization of natural resources, a program of implementation measures, including regulations, programs, public works projects and financing measures necessary to carry out the project, and a statement of the relationship of the Specific Plan to the General Plan. (Gov. Code § 65451.)

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The Draft EIR describes the Specific Plan in very general terms, and limits itself primarily to outlining the proposed land uses for Phase 1. The report fails to provide a detailed description of the proposed Specific Plan elements, the policies, standards and criteria proposed to govern development, or the regulations, programs and financing plan proposed to implement and carry out the project. The Draft EIR also fails to relate the Specific Plan to project phasing. For example, it is not clear whether there is a master Specific Plan applicable to the overall project, or whether Specific Plans will be developed for each phase of the project.

It is also not permissible to describe the project by reference to other documents, even if such documents are available for public review. Although an EIR may incorporate information by reference, this device is appropriate only for background material and does not apply to materials that "contribute directly to the analysis at hand." (14 CCR § 15150, subd. (f).) An accurate and complete description of the project is an essential component of an adequate EIR and must be included in the document itself. Without more information on the Specific Plan included in the EIR, it is impossible for reviewers of the document to conduct a meaningful evaluation of the potential impacts of plan implementation, or to assess the feasibility and effectiveness of recommended mitigation measures.

The description of the project which is the subject of the project-level review is also incomplete. The deficiencies in the Phase 1 project description are particularly serious given the significance of a project-level analysis. The Draft EIR's use of the terms "program" and "project" is important since these are terms of art under CEQA and they have a specific legal meaning.

CEQA authorizes alternative procedural mechanisms intended to ensure careful consideration of environmental effects and at the same time avoid redundancy in environmental analysis. For example, a "program EIR" is permitted in cases where an agency is implementing a series of related projects. (14 CCR § 15168.) The program EIR provides an analytical framework for a more detailed analysis in subsequent EIRs on individual elements in the implementation program. However, a program EIR must address the potential impacts of the program in as specific and detailed a fashion as is possible. (14 CCR § 15168, subd. (c)(5).)

A "project" EIR is the most common type of EIR and examines the environmental impacts of a specific development project. (14 CCR § 15161.) A project EIR must "examine all phases of the project including planning, construction, and operation." (*Ibid.*) It is intended to serve as the final environmental



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analysis of the project, and must provide sufficient information to permit the lead agency to adopt specific mitigation measures or alternatives necessary to lessen or avoid the impacts associated with implementation and operation of the project. A project EIR is also used by Responsible Agencies in issuing other permits and entitlements required for development.

If the Diablo Grande EIR is intended to serve as a project EIR for the Phase 1 development, then the report is correct in identifying the development plan, Williamson Act cancellations, subdivision map approvals and Development Agreement adoption as encompassed within the scope of the project. The approvals required by other agencies should also be included in the project definition. However, the Draft EIR fails to provide an adequate description of these project components.

A development plan in this case presumably must include information similar to that required for Planned Development ("P-D") zoning, since development under the Specific Plan would allow a mix of uses analogous to a P-D District.<sup>1</sup> Such a development plan must include, inter alia, a plot plan for each building site showing location of proposed buildings, all active or abandoned wells, septic systems and irrigation lines, elevations and perspective drawings of all proposed structures, a map of existing and proposed topography and location of all trees, and an economic feasibility report or market analysis. (Stanislaus County Zoning Code, § 21.40.060.) A development plan would also ordinarily include a detailed grading plan.

The Draft EIR indicates that the project proposes a Planned Industrial ("PI") zoning for certain lands in the Phase 1 project. Prior to approval of a Planned Industrial zone, the Applicant is required to submit a development plan that contains, inter alia, a description of proposed uses and disclosure of any chemicals used or wastes generated, a plot plan, circulation system, elevations and perspective drawing, and landscaping plan. (Stanislaus County Zoning Code, § 21.42.040.)

A tentative subdivision map would have to include, inter alia, topographical information showing elevations and contours, location and size of all pipelines, existing irrigation and drainage facilities, irrigation and drainage patterns, location and character of existing or proposed utilities, width, location and purpose of existing or proposed easements, location of all

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<sup>1</sup> The failure of the Draft EIR to identify the standards and criteria required for development plan approval in this case is itself a defect in the analysis.



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trees proposed to remain, and soil and geologic reports. (Stanislaus County Zoning Code, §§ 20.12.040 and 20.12.050.) Additional information regarding floodplain lines, street, canal and easement widths, reserved lots and other data is required for final subdivision maps. (*Id.*, § 20.40.150.)

A Development Agreement may specify the density or intensity of uses permitted for the project, the provisions for reservation or dedication of land for public purposes, the timing and phasing of development, provisions for affordable housing and so forth. (Gov. Code § 65865.2) The nature and substance of these provisions would be significant in assessing potential impacts, mitigation measures and project alternatives.

The cancellation of contracts under the Williamson Act must be considered according to the procedures and standards set forth in the statute. (See Gov. Code §§ 51200 et seq.) The Board of Supervisors must make a series of findings set forth in the Act in order to approve a cancellation request. The County may also have additional policies relevant to the consideration of Williamson Act cancellations. The nature and timing of the cancellation request, and the standards and criteria applicable to the decision must be described in order to evaluate the potential impacts and mitigation measures relevant to this aspect of the project.

The other approvals and entitlements necessary for the Phase 1 development that are mentioned in general terms must also be clearly set forth. The nature, timing and standards relevant to these approvals should be described.

We have identified the elements that should be included in a description of the Phase 1 development project in some detail in order to illustrate the serious deficiency in the project description included in the Draft EIR. The Draft EIR contains only a very general and abbreviated discussion of the Phase 1 development plan. This discussion falls far short of the kind of project description required for a project-level review of the Phase 1 project.

The potential impacts of the construction and implementation of the Phase 1 project cannot be adequately assessed without more information regarding the development project. The information contained in the final development plan, grading and subdivision plans and development agreements is essential in order to identify development impacts and evaluate mitigation measures and alternatives.

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The EIR's response to this comment may be that the detailed information included in final development plans, subdivision maps and development agreements has not yet been prepared, and that the exact nature of the Williamson Act cancellation request and other approvals and entitlements necessary for the project are not yet known. If this is the case, however, then the Draft EIR has incorrectly identified the analysis of the Phase 1 development as a "project-level" review. Without detailed information regarding the development plans for the project, the level of specificity, detail and resolution of issues required in a project EIR is impossible. The analysis is more akin to a program-level review of the Specific Plan land use element for Phase 1 of the project.

This distinction between a project-level and program-level review is not merely semantic, but establishes the legal obligations for subsequent environmental review. On this point, the Draft EIR states that "future project-specific environmental studies will be provided" as preliminary development plans are prepared for subsequent phases of the project. (Draft EIR, p. I-2.) Presumably "environmental studies" refers to a full EIR, since projects within the scope of a program which has been the subject of a programmatic EIR require separate project EIRs. (*Natural Resources Defense Council v. Morton* (D.D.C. 1974) 388 F.Supp. 829; *Natural Resources Defense Council v. Administrator* (D.D.C. 1978) 451 F.Supp. 1245.) In this case, a subsequent EIR will also be required when approval of a detailed Phase 1 development plan is requested.

## II. INADEQUATE DISCUSSION OF POTENTIAL ENVIRONMENTAL EFFECTS

A draft EIR must identify and focus on the potentially significant effects of the proposed project. (14 CCR § 15126, subd. (a).) This analysis must clearly identify and describe both the direct and indirect impacts of the project. (*Ibid.*) The EIR is required to consider direct and indirect impacts as they are likely to occur both in the short-term and long-term. (*Ibid.*) In this case, the Draft EIR fails to consider adequately a wide range of potential impacts of the project.

### A. General Plan Policies

The Draft EIR finds the project consistent with virtually all Stanislaus County General Plan policies that it considers, despite a number of relatively obvious conflicts.

The report concludes that Land Use Policy 11 requiring new residential development to be adjacent to existing urban development is not applicable because Diablo Grande constitutes

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"remote development." (Draft EIR, p. IV-16.) Presumably the Draft EIR means that Policy 11 is not intended to apply to an independent "new town" projects. Even assuming this is true, as discussed elsewhere in these comments, Diablo Grande would not constitute a genuinely self-sufficient community, but is more akin to a large golf-course/residential project. This is exactly the type of remote residential development that Policy 11 was intended to discourage.

The Draft EIR finds the project consistent with Land Use Policy 16, requiring promotion of diversification and growth of the local economy. (Draft EIR, pp. IV-16 - IV-17.) However, unlike the nearby Lakeborough project and the Mountain House project proposed for San Joaquin County, the present project does not propose any industrial or other significant employment generating land uses. As discussed in Dr. Weissman's comments, the project would seriously exacerbate an existing jobs/housing imbalance in the County. The service demands and infrastructure requirements of this essentially residential community may result in a net loss to the local economy.

The Draft EIR also finds the project consistent with Land Use Policies 22 and 23, requiring that new growth not exceed public service and infrastructure capabilities and that new development pay its fair share of cumulative impacts on the circulation system. (Draft EIR, pp. IV-17 - IV-18.) In the absence of a fiscal study and financing plan, the Draft EIR simply has no basis to conclude that these policies will be met. As Dr. Weissman illustrates, it appears highly unlikely that the project could support even its pro rata share of the cost of circulation system improvements. In the absence of further studies, the EIR must find at least a potential for inconsistency with these policies.

The Draft EIR also finds the project consistent with Circulation Policy 1, requiring that adequate circulation facilities be available to serve new development. (Draft EIR, IV-18.) Again, the attached comments demonstrate that adequate transportation facilities are unlikely to be available according to the buildout schedule proposed by the project.

The Draft EIR finds the project consistent with all but one Conservation and Open Space Policy, including policies regarding maintenance of all dedicated open space lands (Policy 1), assurance of compatibility between natural areas and development (Policy 2), protection of sensitive wildlife habitat (Policy 3), protection of groundwater aquifers (Policy 4), avoidance of urban uses in areas designated "Agricultural" in the General Plan

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(Policy 10), and reduction of traffic congestion and air pollution (Policy 19).

These findings appear inconsistent with the report's own conclusions elsewhere that the large residential estates would lessen the value of the conservation lands and would be incompatible with preservation of the open space value of these lands. The findings are also inconsistent with the removal of thousands of acres of potential endangered kit fox habitat and biological corridors. The pumping of groundwater beneath agricultural lands for conveyance to a new remote urban community should also be regarded as at least potentially inconsistent with Policy 4. The fact that the project site would be redesignated from agriculture to urban uses also does not avoid the conflict with Policy 10. Such an interpretation would render the policy meaningless. Finally, the traffic and air pollution impacts of the project discussed elsewhere in these comments make the project at least potentially inconsistent with Policy 19.

The Draft EIR also finds the project consistent with all Safety Policies (Draft EIR, p. IV-23), but fails to address the potential public health impacts from emissions from the nearby Waste-to-Energy facility. In addition, the report fails to consider at all the consistency of the project with Housing Element policies. This could be a significant oversight given the failure of the project to provide any meaningful affordable housing opportunities.

#### B. Williamson Act Cancellations

As discussed in more detail in Dr. Weissman's comments, the Draft EIR fails to examine the potential impacts of the proposed Williamson Act cancellations. In order to approve a request for cancellation, the Board of Supervisors will have to consider whether the cancellation is likely to result in the removal of adjacent lands from agricultural use, whether the cancellation is for an alternative use that is consistent with the County General Plan, whether the cancellation will result in discontinuous patterns of urban development, and whether proximate non-contracted land is available and suitable for the proposed use. (Gov. Code § 51282.) None of these issues is analyzed in the Draft EIR.

#### C. Responsible Agency Approvals

The Draft EIR also indicates that it is intended to serve as a project-level EIR for Phase 1, and would therefore be used by other agencies and approving bodies in granting entitlements for the project. However, the potential effects of the project in

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relationship to these other approvals are not discussed. As a result, this EIR could not serve as the environmental documentation to support project approvals by Responsible Agencies.

For example, the Draft EIR indicates that the project will require certain unspecified approvals by LAFCO. LAFCO is required to exercise its powers so as to provide for planned, well-ordered, efficient urban development patterns, and to discourage urban sprawl and encourage the orderly growth and development of local government agencies. (Gov. Code §§ 56300 and 56301.) In acting on proposals for changes of organization, LAFCO is required to consider the effect of the proposal on the cost and adequacy of services and controls in the area and in adjacent areas, the effect on mutual social and economic interests, and on the local government structure of the county, the conformity of the proposal and its effects with LAFCO policies on providing planned, orderly, efficient patterns of urban development, service provision, and the conversion of open space and agricultural lands, the conformity of the proposal with local agency spheres of influence, and other factors. (See Gov. Code § 56841.)

If this EIR is to serve as environmental documentation in LAFCO proceedings related to the Phase 1 project, then the report must discuss the impact of the project on the policies and factors that LAFCO is legally-mandated to consider. The following is just some of the information that should be included: 1) clear delineation of all existing boundaries and adopted spheres of influence for all cities, special districts or other agencies potentially affected by the project; 2) identification of all required changes of organization and reorganizations required by the project (e.g., special district formation, annexations, detachments, sphere of influence amendments, etc.); and 3) discussion of the affect of the proposal on the cost and adequacy of services in the project area, in adjacent areas and in the service areas of all affected service providers.

In addition to LAFCO, the Army Corps of Engineers may have to issue a permit under section 404 of the Clean Water Act because of the creek and wetland impacts associated with the project, the CDFG may have to issue a streambed alteration permit for the creek work, the United States Fish & Wildlife Service ("USFSW") may have to authorize a "taking" of endangered species under the Endangered Species Act, and so on.

As Lead Agency, the County is required to address the wetlands, endangered species and other issues in this EIR; it

cannot rely on subsequent permitting agencies to evaluate these issues. An EIR may not refuse to consider potential impacts on the ground that responsible agencies with subsequent permitting responsibility are empowered to address impacts. (*Citizens for Quality Growth v. City of Mount Shasta*, (1988) 198 Cal.App.3d 433, 443, fn. 8 [243 Cal.rptr. 727].) Deferring assessment of these impacts also violates CEQA's requirement that environmental review occur at the earliest feasible time (14 CCR § 15004, subd. (b)), and is inconsistent with the County's obligation to conduct a comprehensive environmental evaluation of the project. (See *Sundstrom v. County of Mendocino*, (1988) 202 Cal.App.3d 296, 308-309 [248 Cal.Rptr. 352] and *Oro Fino Gold Mining Corporation v. County of El Dorado* (1990) 225 Cal.App.3d 872, 884-885 [274 Cal.Rptr. 720].)

#### D. Off-Site Water Facilities

The Draft EIR also fails to address adequately the potential impacts of the off-site facilities necessary to provide potable water to the project. As discussed above, the court in *Santiago County Water District v. County of Orange*, supra, 118 Cal.App.3d 818, expressly held that off-site water storage, pumping and delivery facilities required to supply a proposed project must be considered an integral part of the project. Accordingly, the environmental effects of such facilities must be addressed in the EIR.

The Draft EIR fails to examine the potential for the proposed offsite groundwater pumping to adversely affect the groundwater aquifer. A proposal to supply water to a new town development in the western foothills through the purchase of agricultural lands on the valley floor for the groundwater rights is unprecedented and presents troubling implications for the future of agriculture in the County. The Draft EIR should discuss this proposal, together with potential cumulative impacts, in relation to County policies regarding the protection of groundwater resources, preservation of agricultural land uses and the potential for subsidence. The Draft EIR should also discuss the particular pumping requirements and aquifer levels at issue here, the precise location of pumping facilities and pipeline routes, and the potential impacts associated with these facilities.

The Draft EIR also improperly defers any consideration of the proposed Madera County facilities or Yuba County diversions being considered by the Applicant to address the long-term water needs of the project. The Draft EIR acknowledges that development of these off-site facilities may have significant impacts, but declined to consider them on the ground that the

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facilities are only in the conceptual stage and impact assessment would be too speculative. However, "[w]hile foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can." (14 CCR § 15144.) A lead agency may abandon discussion of a potential impact only if it finds, "after thorough investigation," that the particular impact is too speculative for evaluation. (14 CCR § 15145.)

#### E. Endangered Species

The Draft EIR also fails to adequately address potential impacts on the endangered San Joaquin kit fox. The federal Endangered Species Act, 16 U.S.C. section 1531 et seq., strictly prohibits the "taking" of any endangered species. (16 U.S.C. § 1538(a)(1)(B); *Tennessee Valley Authority v. Hill* (1978) 437 U.S. 153 [98 S.Ct. 2279].) "Taking" means to "harass, harm, pursue, hunt, wound . . . or attempt to engage in any such conduct." (16 U.S.C. § 1532(14).) "[H]arm includes not only direct physical injury, but also injury caused by impairment of essential behavior patterns via habitat modification that can have significant and permanent effects on a listed species." (*Palila v. Hawaii Dept. of Land & Natural Resources* (9th Cir. 1988) 852 F.2d 1106, 1108.)

The proposed project would destroy thousands of acres of suitable kit fox habitat and potential dens in an area that is within the mapped range of the species. The Draft EIR concludes that the kit fox is likely to be present on the project site. (Draft EIR, p. IV-115.) However, as Dr. Weissman's comments indicate, the incomplete and inadequate surveys that serve as the basis for the EIR's analysis are likely to significantly understate the potential occurrence of the kit fox on the project site.

The destruction of potential habitat and dens is precisely the kind of harm prohibited by the Endangered Species Act. In the absence of mitigation formally approved by the USFWS, the proposed project would not be allowed to proceed.

Permits may be obtained under the Act only under limited circumstances. Private parties must obtain a permit based on a Habitat Conservation Plan ("HCP") that is acceptable to the Secretary of the Interior. (Section 10, Endangered Species Act, 16 U.S.C. § 1539.) An HCP must specify the impact of the proposed taking of the endangered species, the mitigation proposed and the funding for such mitigation, why alternatives have not been utilized and any other information required by the

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Secretary. Unless the Secretary approves the HCP and issues a permit, the project may not go forward.

If the Army Corps of Engineers is required to issue a fill permit under section 404 of the Clear Water Act and the fill activity may affect the endangered species, then the Corps is required to consult with the USFWS under Section 7 of the Endangered Species Act in lieu of the Section 10 process. If Section 7 consultation is initiated, the USFWS will prepare a biological assessment. The project will be allowed to proceed only if the USFWS determines that the project, as mitigated, is not likely to jeopardize the continued existence of the kit fox. (Section 7, Endangered Species Act, 16 U.S.C. § 1536.)

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In this case, the identification of mitigation habitat to replace any habitat lost to the project may be impossible. Most of the area where the kit fox once thrived has been converted to intensive agriculture or urban uses, and may not be available. Other lands within the kit fox range that are already serving as habitat would not compensate for areas lost to the project.

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The Draft EIR does not state that the destruction of kit fox habitat would be illegal under federal law. The report does not describe the requirements of the Endangered Species Act or outline the process required for obtaining authorization to proceed under the Act. It does not describe where mitigation habitat might be found. All of these issues must be addressed.

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#### F. Construction Workforce Impacts

The Draft EIR indicates that the project would create construction employment opportunities through project buildout in 2005. (Draft EIR, IV-24.) The report also claims that "project-dependent construction economic activity (including construction jobs) would be regionally based, and may be considered a short-term economic benefit of the project." (*Ibid* emphasis added.) The Draft EIR provides no explanation or support for this assertion.

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In recent years, contractors building large residential and industrial projects have in a number of cases obtained their construction workforce by recruiting workers from low-wage states outside of California. This practice has two consequences: 1) it results in an influx of temporary, transient workers and their families into an area and increases demands on schools, health and welfare and other public services; and 2) it reduces the employment and economic benefits to local communities.



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The EIR should address the potential for construction workforce impacts related to the project and should develop appropriate local-hire requirements or other appropriate mitigation.

#### G. Other Issues not Adequately Addressed

Dr. Weissman's comments address most of the issues discussed in this section in greater detail. In addition, her comments identify a number of other potential effects of the project that are not adequately addressed. These additional issues include: jobs/housing balance; housing affordability; impacts on agricultural lands and agricultural operations; fiscal impacts; public service and infrastructure availability and financing; school impacts; traffic and transportation system effects; school impacts; vegetation and wildlife impacts; and air quality effects.

#### H. General Deficiencies in the Analysis

In addition to the inadequate analysis of the specific issues discussed above, the assessment of impacts suffers from at least two deficiencies which undermine the analysis as a whole. The first is the report's unsupported assumption that the proposed community would attract substantial numbers of retirees and seasonal residents. As discussed in Dr. Weissman's comments, this assumption substantially reduces the significance of a number of potential impacts of the project.

Since there is no assurance that the project will in fact attract the profile of residents indicated by the Applicant, the EIR must identify a reasonable "worst case" analysis of project impacts assuming demographics that would be typical of projects in the region. CEQA requires that "significant effects be discussed with emphasis in proportion their severity and probability of occurrence." (14 CCR § 15143.) In this case, the Draft EIR has not demonstrated that the more severe impacts of a non-retirement community will not occur.

The second general problem with the impact analysis is its failure to clearly identify which impacts are considered to be significant. "The determination of significance is one of the key decisions in the CEQA process." (See Discussion following 14 CCR § 15064.) It is this determination that imposes an obligation on the lead agency to require mitigation measures or changes in the project to mitigate or avoid the identified effects. (14 CCR § 15064.) The determination of significance also requires the lead agency to make certain mandatory findings for each significant effect identified, including findings that

appropriate mitigation measures or changes in the project have been adopted, or that overriding considerations support approval despite the significant effect. (Ibid.)

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Using the vegetation and wildlife section as an example, the Draft EIR concludes that the project would allow continued livestock grazing in the Conservation Areas which would reduce habitat value, would allow public access into areas of high wildlife value, would build access roadways along creeks that would increase the number of road-kills, would introduce exotic plants that could disperse and compete with native plants, would introduce dogs and cats that would cause predation of wildlife species, would introduce fertilizers, herbicides and pesticides that could adversely affect wildlife species, would introduce trails into areas that may support plant species of special concern, could result in habitat loss or disruption of movement corridors for the San Joaquin kit fox and other species, would result in the loss of blue oak woodland and so on. (Draft EIR pp. IV-122 - IV-124.)

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Are these impacts and potential impacts significant? In not one of these cases is the significance of the impact indicated. As a result, the decision-maker has no way of determining whether mitigation or project changes are required or whether mandatory findings must be made. This defect is present throughout the analysis.

### III. INADEQUATE IDENTIFICATION AND EVALUATION OF MITIGATION MEASURES

The courts have recognized that the consideration of mitigation measures is at the heart of the EIR process. It is at this juncture that the lead agency makes the critical determinations regarding the measures available to avoid or lessen the significance of project impacts. In order to ensure that project impacts are genuinely addressed, CEQA requires that specific feasible, effective and enforceable mitigation measures be identified for each significant impact, and that all uncertainties regarding the mitigation of impacts be resolved in the EIR.

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In the present case, there has been a wholesale failure to comply with CEQA requirements regarding the consideration of mitigation measures. As a result, the EIR provides no assurance that the significant effects of the project will be avoided or reduced in significance. This deficiency in the CEQA analysis is profoundly important in the context of this EIR, given the number of potentially significant effects of the project. In view of the EIR's inadequate treatment of this issue, the legal

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requirements for the consideration of mitigation measures are set forth below in some detail.

Before approving a project for which one or more significant effects has been identified, the lead agency must find for each significant effect: 1) that measures have been required which mitigate or avoid the impact; 2) that the agency lacks jurisdiction to require the mitigation but that another agency has such authority; or 3) that specific economic, social or other considerations make infeasible the mitigation measures identified in the EIR. (Pub. Resources Code § 21081; 14 CCR § 15091; *Citizens for Quality Growth v. City of Mount Shasta*, *supra*, 198 Cal.App. 3d 433.) These findings regarding project mitigation must be supported by substantial evidence in the administrative record. (Pub. Resources Code § 21081.5; 14 CCR § 15091, subd. (b).)

In order for the lead agency to comply with this obligation, the EIR must identify specific and concrete mitigation measures for each significant effect. (14 CCR § 15126, subd. (c); see also *Stevens v. City of Glendale* (1981) 125 Cal.App.2d 986, 995-996 [178 Cal.Rptr. 367].) Where a number of alternative mitigation measures may be available, the EIR must evaluate each such measure and must explain the rationale for recommending one mitigation approach over the others. (*Ibid.*) The discussion must also distinguish between measures proposed by the applicant to be included in the project, and those measures recommended as conditions of approval. (*Ibid.*)

A lead agency is also precluded from making the required findings unless the record shows that all uncertainties regarding the mitigation of impacts have been resolved. An agency may not rely on mitigation measures of uncertain efficacy or feasibility (*Kings County v. City of Hanford*, *supra*, 221 Cal.App.3d at pp. 727-728), nor may it defer consideration of mitigation measures to later studies (*Sundstrom v. County of Mendocino*, *supra*, 202 Cal.App.3d 296) or to other agencies (*Citizens for Quality Growth v. City of Mount Shasta*, *supra*, 198 Cal.App.3d at p. 442).

In *Kings County*, the primary measure proposed to mitigate the water use impacts of the project and ensure recharge of an overdrawn aquifer was a "mitigation agreement" by which the applicant agreed to provide funds to a local water district to purchase water from unspecified sources. The court found this mitigation measure inadequate because the record did not show that sufficient water to recharge the aquifer would be available for purchase. (*Kings County v. City of Hanford*, *supra*, 221 Cal.App.3d at pp. 727-728.)

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In *Sundstrom*, the lead agency conditioned its approval of the project on the preparation of a hydrological study evaluating the project's potential impacts on downslope properties. The study would then permit agency staff to develop specific mitigation measures. The court concluded that since the success of the mitigation was uncertain, the lead agency could not have made a reasonable finding that all potential impacts had been mitigated below a level of significance. (*Sundstrom v. County of Mendocino*, *supra*, 202 Cal.App.3d at pp. 306-308.)

In *Citizens for Quality Growth*, the City defended the adequacy of its consideration of wetlands impacts by arguing that it was under no obligation to consider impacts of wetlands because any filling of wetlands would be regulated by the Army Corps of Engineers. The court rejected this argument, holding that the City as lead agency was required to address all potential impacts and evaluate mitigation measures and project alternatives. (*Citizens for Quality Growth v. City of Mount Shasta*, *supra*, 198 Cal.App.3d at p. 732, fn. 8.)

The EIR is also required to analyze the potential effects of recommended mitigation measures if such measures would themselves produce potentially significant impacts. (14 CCR § 15126, subd. (c); see also *Stevens v. City of Glendale*, *supra*, 125 Cal.App. 3d at pp. 995-996.) Finally, CEQA requires that the lead agency adopt a "reporting and monitoring program" to ensure compliance with mitigation requirements during project implementation. (Pub. Resources Code § 21081.6.)

Dr. Weissman's comments discuss in detail the specific mitigation measures that are inadequately addressed. Probably the most dramatic example of inadequacy occurs with respect to the measures proposed to address potential kit fox impacts. The report simply recommends road undercrossings and consultation with USFWS. As Lead Agency, the County may not simply defer the matter to USFWS review. It must identify the specific measures required to address potential impacts on the kit fox.

Dr. Weissman also demonstrates that the purported mitigation for transportation and circulation, schools, water supply and other public service impacts are inadequately considered and left unresolved. For example, the Draft EIR itself acknowledges that sufficient water is not available even for buildout of Phase 1 of the project.

Throughout the Draft EIR, the report fails to link specific mitigation measures to specific determinations of significance. This may be in part a result of the failure to clearly identify which impacts are considered significant, as discussed above, but

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it nevertheless precludes a decision about whether impacts have indeed been addressed. It also makes adoption of required findings impossible.

The Draft EIR also violates CEQA by deferring consideration of a number of mitigation measures to later studies. These include kit fox surveys and other biological studies, erosion control and rehabilitation plans, detailed geotechnical studies, management plans for Conservation Areas, wetland delineation and wetland mitigation plan, detailed grading plans, off-site potable water facilities, location and design of stormwater detention basins, design plan for creek improvements, golf-course and drainage system design plans.

#### IV. INADEQUATE CONSIDERATION OF GROWTH-INDUCING IMPACTS

A draft EIR must discuss the potential of the proposed project to promote, either directly or indirectly, economic or population growth, or the construction of additional housing, in the surrounding environment. (14 CCR § 15126, subd. (g); Pub. Resources Code § 21100, subd. (g).) The analysis must evaluate those characteristics of the project that may encourage or facilitate activities that, either individually or cumulatively, may be growth inducing. (*Ibid.*) For example, population increases may further tax existing community facilities and so consideration must be given to this impact. (*Ibid.*) Similarly, the expansion a waste water treatment plant could accommodate new development and thereby trigger growth-related impacts. (*Ibid.*)

The Draft EIR's "analysis" of the potential growth inducing impacts of the project consists of a cursory one page discussion. (See Draft EIR, p. V-6.) The Draft EIR includes this abbreviated treatment of the issue despite the fact that: 1) If approved, this would be the largest single development project ever authorized by Stanislaus County; 2) The project site is in the heart of the largest remaining open space region in the County; 3) The project would convert a significant proportion of the County's remaining grazing lands; 4) The project is near other proposed "new town" projects; 5) The area already suffers from inadequate water supplies and transportation systems are nearing capacity; and 6) The project would require extensive infrastructure improvements and increases in service capacity.

The Draft EIR simply states the obvious conclusion that the conversion of the project site from open space to urban uses and the extension of urban services into the area will create growth pressures. The report does not discuss, however, the specific nature of the growth inducing impacts, whether such impacts

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should be considered significant, or the availability of mitigation measures to address such impacts.

A conclusory statement devoid of analysis and explanation does not foster informed decision-making and does not permit meaningful public participation. The EIR must be revised to include a meaningful discussion of the potential growth-inducing impacts of the project.

V. FAILURE TO EVALUATE IMPACTS ON ENERGY CONSUMPTION

CEQA requires that an EIR propose mitigation measures "to reduce wasteful, inefficient, and unnecessary consumption of energy." (Pub. Resources Code § 21000, subd. (c).) To satisfy this obligation, the Guidelines provide that an EIR must "include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy." (Guidelines, Appen. F.) If a project will "[e]ncourage activities which result in the use of large amounts of fuel, water, or energy in a wasteful manner" it will "normally have a significant effect on the environment." (Guidelines, Appen. G.)

Appendix F of the Guidelines, which is entitled "Energy Conservation", states that the project description may include the "[e]nergy consuming equipment and processes which will be used during construction [and] operation . . . of the 'project'", the "[t]otal energy requirements of the project by fuel type and end use", "[e]nergy conservation equipment and design features", and "[i]nitial and life-cycle energy costs".

Appendix F also sets forth a list of energy related environmental impacts, which include the "degree to which the project complies with existing energy standards" and the "estimated energy consumption of growth induced by the project."

In addition, Appendix F describes potential mitigation measures as those which would reduce "wasteful, inefficient and unnecessary consumption of energy", and the "siting, orientation, and design to minimize energy consumption, including transportation energy."

Despite the express requirement that energy impacts be considered, the Draft EIR fails to include any discussion of the issue. Elements of the project which should be discussed in this context include, but are not limited to: 1) inadequate commercial and employment-generating uses to serve the development, requiring increased trips out of the area; 2) excessive grading; 3) energy efficient building design; 4) localized jobs/housing



balance as a means of reducing traffic generation; 5) alternative transportation systems; and 6) energy demands of off-site water service improvements necessary to serve the project.

#### VI. INADEQUATE CONSIDERATION OF CUMULATIVE IMPACTS

The Draft EIR's treatment of cumulative effects falls far short of the legal standards for an adequate analysis. The deficiency is particularly serious in this case given the scope of the proposed project, which alone will have a significant regional impact. The report's failure to adequately assess project impacts together with cumulative effects may dramatically understate the true magnitude of potential impacts.

CEQA explicitly requires that an EIR find that a project may have a significant effect on the environment if "[t]he possible effects of a project are individually limited but cumulatively considerable." (Pub. Resources Code § 20183, subd. (b).) The CEQA Guidelines define "cumulatively considerable" to mean "that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (14 CCR § 15065, subd. (c).)

The CEQA Guidelines further specify that an adequate discussion of cumulative impacts include a listing of "past, present, and reasonably anticipated future projects," a "summary of the expected environmental effects" of the relevant projects, and a "reasonable analysis of the[ir] cumulative impacts." (14 CCR § 15130, subd. (b).)

The courts have vigorously enforced the obligation to discuss cumulative impacts. In *San Franciscans For Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61 [198 Cal.Rptr. 634], the court called the cumulative impact analysis "vital" and concluded that an inadequate cumulative impact analysis subverts an agency's ability to adopt appropriate and effective mitigation measures and skews its perspective concerning the benefits of particular projects. (*Id.* at pp. 73 and 80; see also *Kings County Farm Bureau v. City of Hanford*, *supra*, 221 Cal.App.3d 692; *Mountain Lion Coalition v. California Fish & Game Comm'n.* (1989) 214 Cal.App.3d 1043 [263 Cal.Rptr. 104]; *Citizens to Preserve the Ojai v. County of Ventura* (1985) 176 Cal.App.3d 421 [222 Cal.Rptr. 247].)

The cumulative impact analysis suffers from two fundamental defects. The first is a failure to state a clear and complete basis for the analysis. It is not clear whether the projects listed in Table V-G-A constitute the complete list of projects

and geographic area utilized in the cumulative impact discussion. The EIR must clearly describe the basis for the analysis by setting forth: 1) the complete list of past, present and reasonably foreseeable projects included in the cumulative impact analysis; 2) describe any other projections used in the analysis; and 3) indicate the geographic area covered in the analysis. In the absence of this information, it is impossible for decision-makers and the general public to evaluate the assessment of cumulative effects.

The list of projects in Table V-G-A is also far from complete. Dr. Weissman discusses in detail the other projects proposed for the westside of San Joaquin, Stanislaus and Merced counties which must be considered in the analysis. The analysis should also include the buildout of General Plans for westside cities, including Tracy, Patterson, Newman, and Gustine since these cities would also contribute to cumulative traffic, air quality, water service demand, wastewater generation and other impacts.

The second fundamental defect in the analysis is the complete absence of any specific or quantitative discussion of particular cumulative effects. The brief discussion presented solely in qualitative terms precludes a meaningful assessment of the magnitude of the potential impacts. This general discussion also precludes an identification and development of appropriate mitigation measures. It is simply impossible to determine from this presentation whether the potential cumulative effects on traffic, air quality, water supply, kit fox habitat, and other key areas will be significant.

## VII. INADEQUATE CONSIDERATION OF ALTERNATIVES

In considering alternatives to the proposed project, the CEQA Guidelines state: "The key issue is whether the selection and discussion of alternatives fosters informed decision-making and informed public participation." (14 CCR § 15126, subd. (d) (5).) The courts have interpreted this requirement to mean that an EIR must explain in reasonable detail a range of alternatives to the proposed project and, if the applicant finds them to be infeasible, the reasons and facts in support of such conclusions. (See *Laurel Heights Improvement Ass'n v. University of California*, *supra*, 47 Cal.3d at p. 406.)

As discussed in detail in Dr. Weissman's comments, the Draft EIR fails to present an adequate analysis of alternatives. The report has failed to select any alternative that would provide a meaningful reduction in project impacts. The "mitigated" alternative that is identified is not analyzed in a manner which



would permit a specific comparison of the impacts of the alternative project versus the impacts of the proposed project. Dr. Weissman discusses a "restructured project" alternative that should be addressed in the EIR.

VIII. THE DEFICIENT ANALYSIS PRECLUDES INFORMED DECISION MAKING AND INFORMED PUBLIC PARTICIPATION

"An EIR is an 'environmental "alarm bell" whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.'" (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 393, 392 [253 Cal.Rptr. 426, 430].) An environmental evaluation conducted in accordance with CEQA also serves to "demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action." (14 CCR § 15003, subd. (d); *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 86 [118 Cal.Rptr. 34].)

"'[T]he requirement of a detailed statement helps insure the integrity of the process of decision by precluding stubborn problems or serious criticism from being swept under the rug.'" (*Sutter Sensible Planning, Inc. v. Board of Supervisors* (1981) 122 Cal.App.3d 813, 820 [176 Cal.Rptr. 342].) It also ensures "the right of the public to be informed in such a way that it can intelligently weigh the environmental consequences of any contemplated action and have an appropriate voice in the formulation of any decision.'" (*Environmental Planning and Information Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 354 [182 Cal.Rptr 317].)

In order to serve these functions, the EIR must "provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project." (Pub. Resources Code § 21061.) The analysis must be specific and detailed, and must also be supported by empirical or experimental data, scientific authorities or explanatory information, including comparative and quantitative evaluation. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692 [270 Cal.Rptr. 650]; *Whitman v. Board of Supervisors* (1979) 88 Cal.App.3d 397 [151 Cal.Rptr. 866]; *People v. County of Kern* (1974) 39 Cal.App. 3d 830 [115 Cal.Rptr 67].)

"The degree of specificity required in an EIR will correspond to the degree of specificity involved in the

underlying activity which is described in an EIR." (14 CCR § 15146.) Accordingly, "[a]n EIR for a construction project will necessarily be more detailed in the specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy." (14 CCR § 15146, subd. (b).)

Beginning with the description of the project, the Draft EIR fails to facilitate informed decision-making and meaningful public participation. As discussed above, the project definition is ambiguous and incomplete. This uncertain and curtailed project description undermines the informational objectives of CEQA.

As a project EIR for the Phase 1 development, this document must address not only the general issues associated the land use plan, but must identify, discuss and resolve all potential environmental impacts related to development of the project over its 10-year buildout. As discussed in detail in these comments, the Draft EIR fails to address numerous effects associated with the project. For these reasons, the document as a whole fails to comply with the informational objectives of CEQA.

#### IX. DRAFT EIR MUST BE RECIRCULATED

CEQA requires recirculation of an EIR whenever "significant new information" is added to a report or where there are "substantial changes" to the initial draft. (See Pub. Resources Code § 21092.1 and *Sutter Sensible Planning v. Sutter County Board*, supra, 122 Cal.App.3d 813.) Because the failure to recirculate eliminates essential elements of the CEQA process, the *Sutter* court stated that the failure to recirculate an EIR turned the process of environmental evaluation into a "useless ritual" which could jeopardize "responsible decision-making." (*Id.* at p. 822.) Both the opportunity to comment and the preparation of written responses to those comments are crucial parts of the EIR process.

The *Sutter* court held that the failure to include all significant information in the original document denied the public the "opportunity to test, assess, and evaluate the data and make an informed judgment as to the validity of the conclusions to be drawn therefrom." (*Sutter Sensible Planning v. Sutter County Board*, supra, 122 Cal.App.3d at p. 822.)

The *Sutter* decision makes clear that recirculation is required not only when new significant impacts are found, but also when significant new information is added to the document.

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The public must have the opportunity to test, assess and evaluate the agency's analysis. It is not enough to merely have the opportunity to review the conclusions. (*Mountain Lion Coalition v. California Fish & Game Com'n, supra*, 214 Cal.App.3d 1043.)

In *M.M. Homeowners v. San Buenaventura County* (1985) 165 Cal.App.3d 357 [212 Cal.Rptr. 127], the court noted that "[i]n reviewing an EIR a paramount consideration is the right of the public to be informed in such a way that it can intelligently weigh the environmental consequences of any contemplated action and have an appropriate voice in the formulation of any decision." (*Id.* at p. 365; citation omitted.)

Recirculation of the EIR is also required in order to assure that responses will be prepared by the lead agency to all comments. "The policy of citizen input which underlies the act supports the requirement that the responsible public officials set forth in detail the reasons why the economic and social value of the project, in their opinion, overcomes the significant environmental objections raised by the public." *People v. County of Kern, supra*, 39 Cal.App.3d 830.) The responses to comments play a vital role in insuring the integrity of the process by precluding stubborn problems or serious criticism from being swept under the rug. (*Ibid.*)

Responses to comments play such an important role in the environmental evaluation that the CEQA Guidelines spell out the agency's duty to avoid pro forma responses:

"In particular, the major environmental issues raised when the Lead Agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail giving reasons why specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice." (14 CCR § 15088, subd. (b).)

CEQA is much more than simply a presentation to the public of the lead agency's environmental analysis. Public comments and responses to comments are equally essential ingredients of a valid EIR. As one court observed:

"CEQA compels an interactive process of assessment of environmental impacts and responsive project modification which must be genuine. It must be open to the public, premised upon a full and meaningful disclosure of the scope, purposes and effect of a

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October 19, 1992  
Page 27

consistently described project, with flexibility to respond to unforeseen insights that emerge from the process." (*County of Inyo v. City of Los Angeles* (1984) 160 Cal.App.3d 1178, 1185 [207 Cal.Rptr. 425, 429].)

Failure to recirculate an EIR when there is significant new information or a substantial change is fatal to the process. The final EIR will not be valid because essential components have not been included. California courts have not hesitated either to protect the right to comment or to enforce the duty to prepare responses. Recirculation of an EIR is consistent with CEQA's fundamental purpose: to provide information about environmental impacts. Failure to recirculate deprives the decision-maker of comments from responsible agencies and members of the public, and of written, reasoned responses to those comments.

There can be no question that significant new information and analysis will be required in order for the Draft EIR to comply with CEQA requirements and to respond to these comments. Beginning with redefinition of the project and clarification of the subject of the environmental review, the EIR will require major revisions and additional analysis. Under these circumstances, the public must be afforded an opportunity to review and comment on the revised document.

#### XI. CONCLUSION

The Draft EIR fails to comply with CEQA standards in a number of significant respects. The deficiencies in the document are particularly disturbing in the context of this project, one of the largest development projects in the County's history. Local 437 urges the County to consider these comments and carefully explore all potential effects associated with the project prior to taking action.

Very truly yours,



Daniel L. Cardozo

DLC:bh

**RESPONSES TO PLUMBERS AND STEAMFITTERS U.A. LOCAL OCTOBER 19, 1992  
COMMENT LETTER**

1. Specific responses are provided in response to specific comments below and in Thomas Reid Associates' October 16, 1992 comment letter.
2. The County considers the project description in this EIR to be adequate. Please refer to the revised Introduction chapter of the EIR (see response to comment 1 of Merced County Planning Department's October 15, 1992 comment letter) for clarification as to the actions covered by this EIR.
3. See response to comment 2, above.
4. See response to comment 2, above.
5. See response to comment 2, above.
6. The commenter's opinion is noted. Specific comments are responded to in responses 7 through 10, below.
7. It is unlikely that the intention of Land Use Policy 11 is to discourage remote development projects such as Diablo Grande, which would provide housing for an estimated 11,920 people. The EIR interprets this policy statement as addressing smaller residential subdivision projects.
8. Because Phase 1 includes the proposed 90 acres of employment, it is reasonable to consider Phase 1 as consistent with Policy 16. Phases 2 through 5 are predominantly residential in character and their construction would not appreciably promote diversification. Therefore, although residents of Phases 2 through 5 would utilize employment from land uses constructed in Phase 1, these later phases could be considered inconsistent with Land Use Policy 6. However, the project proposes that seasonal and retirement residents would comprise a considerable portion of the project residents. These residents would not add to the pool of wage-earners residing on site and, in turn, not have as significant an impact on the jobs/housing balance. Tables IV.A-C and IV.A-D, attached, show the number of wage-earning residents proposed for Phase 1 and the Overall Project. Based on these tables, the project would attract approximately 1,500 wage-earning residents. As discussed on page IV-31 of the EIR, the project would generate approximately 1,900 permanent on-site jobs, or 1.27 jobs per wage-earning resident.

Table IV.A-C  
Phase 1 Residences, Population and Wage-earners

Unit Type	Resident Type	Number Of Units (1)	Percentage Unit Type (2)	Number of Households (3)	Number of Residents (4)	Number of Wage-earners (5)
Single Family Detached	Permanent	950	51.4	488	1514	537
	Seasonal	950	10.0	95	295	0
	Retirement	950	38.6	367	909	0
Single Family Attached	Permanent	595	40.7	242	557	266
	Seasonal	595	13.0	77	178	0
	Retirement	595	46.3	275	507	0
Multiple Family	Permanent	420	28.0	118	212	129
	Seasonal	420	24.0	101	181	0
	Retirement	420	48.0	202	290	0
Totals				1965	4643	933

**Assumptions:**

- Employable residents per permanent household: 1.1
- Employable residents per retirement and seasonal household: 0.0
- residents per single family detached household: 3.1
- residents per single family attached household: 2.3
- residents per multiple family attached household: 1.8
- retirement residences have 20 percent fewer residents per household

**Notes:**

- (1) Derived from Land Use Plan
- (2) Derived from Marketing Plan
- (3) Derived by multiplying the Number of Units by the Percentage of Unit Type
- (4) Derived by multiplying the Number of Households by the number of residents per unit type
- (5) Derived by multiplying the Number of Households by the number of wage-earners per unit type

Table IV.A-D  
Overall Site Residences, Population and Wage-earners

Unit Type	Resident Type	Number Of Units (1)	Percentage Unit Type (2)	Number of Households (3)	Number of Residents (4)	Number of Wage-earners (5)
Single Family Detached	Permanent	1990	51.4	1023	3171	1125
	Seasonal	1990	10.0	199	617	0
	Retirement	1990	38.6	768	1905	0
Single Family Attached	Permanent	415	40.7	169	388	186
	Seasonal	415	13.0	54	124	0
	Retirement	415	46.3	192	354	0
Multiple Family	Permanent	630	28.0	176	318	194
	Seasonal	630	24.0	151	272	0
	Retirement	630	48.0	302	435	0
Totals				3035	7584	1505

#### Assumptions

- Employable residents per permanent household: 1.1
- Employable residents per retirement and seasonal household: 0.0
- residents per single family detached household: 3.1
- residents per single family attached household: 2.3
- residents per multiple family attached household: 1.8
- retirement residences have 20 percent fewer residents per household

#### Notes:

- (1) Derived from Land Use Plan
- (2) Derived from Marketing Plan
- (3) Derived by multiplying the Number of Units by the Percentage of Unit Type
- (4) Derived by multiplying the Number of Households by the number of residents per unit type
- (5) Derived by multiplying the Number of Households by the number of wage-earners per unit type

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9. Page IV-18, paragraph 2. sentence three is hereby amended as follows:

"Through this coordinated effort, *and assuming the applicant's contribution will be based on appropriate fiscal studies*, the project applicant would pay an appropriate share of the costs to mitigate cumulative impacts to mitigate cumulative impacts to the existing roadways."

10. Diablo Grande circulation issues pertinent to Circulation Policy 1 are addressed in detail in the responses to Caltrans comments. Caltrans representatives and the project traffic planners have met to review Caltrans comments.

11. The commenter suggests that the project is inconsistent with Conservation/Open Space Policies 1, 2, 3, 4, 10, and 19.

Policy 1 states that the natural environment of dedicated areas should be maintained; this would be implemented through the proposed Diablo Grande control committee.

Policy 2 promotes compatibility between developed and open space areas; this would be implemented through the site plan itself which provides open space buffers between proposed development and open space land use areas.

Policy 3 states that sensitive wildlife habitat and plant life shall be protected from development. As proposed, the project includes some measures designed to implement this policy. However, as discussed in the Vegetation and Wildlife section of the EIR, without additional mitigation the proposed project would result in potential impacts to sensitive habitat and species. This would be inconsistent with Policy 3. Additional measures are recommended by the EIR authors which would provide consistency between Policy 3 and the project.

Policy 4 states that groundwater aquifers and recharge areas should be protected. On page IV-83, the EIR states that the project could reduce groundwater infiltration and increase surface water runoff, resulting in possible reductions in the local groundwater elevations. Without additional mitigation, the project would be potentially inconsistent with Policy 4. Mitigations 2 and 3 on page IV-178 would provide project consistency with Policy 4.

Policy 10 states that areas designated Agriculture should not be allowed to have land uses incompatible with that land use. The EIR suggests that this policy would not be applicable to the site if the County adopts the proposed General Plan Amendment. The commenter appears to be suggesting that even if the County adopts the GPA that the future land use should be compatible with agricultural activities.



Policy 19 states that circulation systems shall be designed and maintained to minimize traffic congestion and air pollution. Diablo Grande circulation issues pertinent to Policy 19 are addressed in detail in the responses to Caltrans comments. Caltrans representatives and the project traffic planners have met to review Caltrans comments.

12. See response to comment 11 of this letter.

13. The waste to energy facility is located approximately 10 miles south of the project site near Crows Landing Road. The facility is identified as an air basin issue and is included in the cumulative scenario for the Air Quality section of the EIR. The project site is outside of the area of direct impacts of the facility due to the land configuration and distance.

Safety issues concerning the Waste-to-Energy facility were evaluated in the EIR prepared for the County in the mid-1980s by Radian, Inc. of Sacramento. As of February 1993, a health risk assessment is being prepared for the facility. The facility is located approximately 10 miles south of the project site near Crows Landing Road. The project site is outside of the area of impact of the facility due to the land configuration and distance.

14. In July 1992 the County adopted the Stanislaus County Housing Element 1992-1997. Goal 1 is to encourage the provision of adequate, affordable housing for residents of all income groups, including very low-, low- and moderate-income households. Policy 1.c states that the County shall provide incentives to developers to build a range of housing that is affordable to County residents, including very low-, low- and moderate-income households. Program 1.8 addresses new towns development and is stated as follows:

"Require specific plans for new towns, or self contained communities of 500 acres or more, to designate land uses that will accommodate housing for all economic groups. The percentage of housing types for each income level will be based on the County's regional housing needs determined on a project specific basis. Factors to be considered include but are not limited to the County's regional housing needs by income group and the overall economic feasibility of the project based on anticipated retail value less costs of land, infrastructure, fees and actual construction."

The project does not include inclusionary housing for very low-, low-, or moderate-income households, and, consequently, the project could be inconsistent with Program 1.8, if the Board of Supervisors determines that the project is a "new town" or a "self-contained community".

1 Due to its size and scale, Diablo Grande's failure to implement  
2 Program 1.8 could be considered a significant impact of the project.  
3 The following mitigation is added to page IV-35:  
4

- 5 6. "If the Board of Supervisors determines that the project  
6 is a 'new town' or 'self-contained community', on-site or  
7 in-lieu very low-, low-, and moderate-income housing  
8 opportunities as described in Housing Element Program  
9 1.8 should be incorporated into the specific plan to the  
10 satisfaction of the County Planning Director."  
11
- 12 15. The project includes a substantive greenbelt which would buffer  
13 development impacts from adjacent land, thereby avoiding  
14 incompatibility with adjacent agricultural uses. The project includes  
15 a General Plan Amendment which would allow the proposed  
16 development to be consistent with the County General Plan.  
17 Cancellation of the property's Williamson Contract may result in the  
18 construction of the proposed planned community within a greenbelt  
19 setting. The greenbelt would discourage future potential  
20 discontinuous patterns of development as a result of the project. The  
21 project site is located within a larger regional open space area which  
22 is subject to Williamson Contract. No proximate, non-contracted land  
23 has been identified that is suitable for this type of project development.  
24
- 25 16. The project would not require a LAFCO reorganization. The overall  
26 site, including Phase 1, is located in unincorporated Stanislaus County  
27 and is not within the urban service zone or sphere of influence of any  
28 incorporated city. Incorporation of the site is not being considered as  
29 part of the project proposal. The overall site, including Phase 1, is  
30 within the West Stanislaus Fire Protection District and the Newman-  
31 Crows Landing Unified School District. The Phase 1 area is within the  
32 Western Hills Water District. The project would not require LAFCO  
33 action on these districts to allow them to serve the site. The remainder  
34 of the site is not within any existing water service or sewer service  
35 district.  
36
- 37 17. Refer to page IV-101, line 33, of the EIR. In the Phase 1 area,  
38 approximately 7.1 acres of riparian areas, including 5.4 acres of  
39 drainages and 1.7 acres of stock ponds. Wetlands present in the Phase  
40 1 area include alkaline areas within the Salado Creek channel and a  
41 large (5.5-acre) alkaline area along the proposed access road near Del  
42 Puerto Canyon Road (see U.S. Fish and Wildlife Service letter, response  
43 to comment 2).  
44
- 45 18. See responses to comment 53 of the Thomas Reid Associates October  
46 16, 1992 comment letter, and comment 3 of the Stanislaus Natural  
47 Heritage Project October 19, 1992 comment letter.  
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19. See response to comment 53 of the Thomas Reid Associates October 16, 1992 comment letter.

20. See response to comments 3 and 5 in the Stanislaus National Heritage Project October 19, 1992 comment letter.

21. a. The issues raised by this comment are discussed in the responses to the comments of the U.S. Fish and Wildlife Service. Refer to responses to comments 6a, 6b, 6c, 11, and 13 of the U.S. Fish and Wildlife Service October 16, 1992 comment letter.

b. The identification of kit fox mitigation habitat is the responsibility of the project sponsor. As noted in response to comment 11 of the U.S. Fish and Wildlife Service October 16, 1992 comment letter, the construction of the access roads for Phase I will result in the elimination of approximately 82.5 acres of occupied kit fox habitat, requiring approximately 250 acres of compensation land at a 3:1 ratio. The status of the Phase I area as kit fox habitat will be determined in consultation with the Fish and Wildlife Service after completion of additional surveys required by the Service.

The Service is accepting occupied kit fox habitat at a ratio of three acres for every acre lost, as mitigation for development projects.

22. Page IV-24, line 25 of the EIR is changed as follows (changes in bold):

"Insofar that project-dependent economic activity would be regionally based, such activity may be considered a short-term economic benefit of the project".

The following mitigation measure is added to pages IV-35 and IV-36 of the EIR and is applicable to the overall site as well as Phase 1:

"In order to reduce the potential for unnecessary migration of out-of-state workers and to increase the opportunity to bolster the local economy; the applicant should make a good-faith effort to the satisfaction of the Planning Director to provide project construction related jobs to California residents, with priority for workers who reside locally in the general region of the project site."

23. See responses to specific comments in the Thomas Reid Associates comment letter.

24. Comment noted. The assumption that the project is a residential resort community is based on the applicant's market study which was included in the Diablo Grande Specific Plan (Technical Appendix) and is available for review at the County Planning Department. The County considers this study to be reasonable.

25. The significance of each potential impact is addressed in the EIR summary and Section V of the EIR.
26. Of the potential impacts discussed on pages IV-122 through IV-124 of the EIR, those impacts which are considered significant are (1) the removal of oaks; (2) any disturbances which could occur in the project open space conservation areas; and (3) any disturbances that would occur in corridors used by San Joaquin kit fox.
27. The commenter's opinion is noted.
28. Refer to responses to comments 6c and 11 of the U.S. Fish and Wildlife Service October 16, 1992 comment letter, and response to comment 14 of the Thomas Reid Associates October 16, 1992 comment letter.
29. Comment noted. See specific responses to comments 19, 24, 26-30, and 53-56 of the Thomas Reid Associates October 16, 1992 comment letter.
30. The Summary section of the EIR (Chapter II) and the Impact Overview section (Chapter V) clearly link specific mitigation measures to specific determinations of significance.
31. Comment noted. Please refer to responses to comments of the Thomas Reid Associates October 16, 1992 comment letter. Specifically see responses to comments 11, 13, 17, 41, 42, 47, 49, 52, and 53 in that letter.
32. The EIR discusses land use growth-inducing issues and impacts of the project on pages IV-26 and IV-33 and suggests mitigation on pages IV-35 and IV-36 to reduce growth-inducing impacts on the Phase 1 and overall sites. On page V-6 the EIR discusses growth-inducing issues on a regional and countywide basis. These discussions meet the requirements of Guidelines § 15126(g) by addressing the ways in which the project could foster economic and population growth, construction of housing, remove obstacles to growth, and affect community services.
33. An analysis of the project's impacts on energy use has been provided in response to comment 38 of the Thomas Reid Associates October 16, 1992 comment letter.
34. The EIR cumulative impacts analysis has been revised in response to comment 34 of the Thomas Reid Associates October 16, 1992 comment letter.
35. See response to comments 36 and 37 of the Thomas Reid Associates' October 16, 1992 comment letter.

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- 36. Comment noted.
- 37. Recirculation of the EIR may be considered by the County Board of Supervisors.
- 38. The commenter's concerns are noted.



# THOMAS REID ASSOCIATES

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October 16, 1992  
TRA FILE: LDGS

Mr. Daniel Cardozo  
Adams & Broadwell  
1875 South Grant Street, Ste. 600  
San Mateo, CA 94402

Dear Mr. Cardozo:

At your request I have reviewed the Diablo Grande Specific Plan Draft Environmental Impact Report (EIR). This EIR states its intent to serve as a "program level environmental analysis of the Specific Plan as well as a project-level analysis of Phase 1 of the development". The Draft EIR is deficient as both a program level EIR for the entire project and as a project-level analysis of the first phase.

The project encompasses a huge area, 29,500 acres, in the western foothills of Stanislaus County, and proposes a total of 5,000 residential units, four golf courses, plus small areas of commercial development in a "town center" and a "research campus". The first phase of the project, stated to build out over 10 years would include 1,965 units, the golf courses, the town center and hotel/conference center.

For a project of this scope, the EIR analysis is incomplete in many regards. The impact assessment is, in many instances, vague and generic, rather than specific to the project. Mitigation measures listed are not tied to impacts. The assessment is based on unsupported market assumptions about the project which result in an underestimation of true project impacts. The EIR in its present form does not comprise a full and accurate disclosure of impacts, and cannot support a decision on the project. The present Draft EIR must be substantially revised and expanded in scope and detail, and recirculated for public review.

The EIR also does not make clear the relationship between a Program EIR and the requirement for future CEQA review of later project phases. The Draft EIR contains the vague statement (p. I-2) that "Upon preparation of detailed proposed preliminary development plans within the Specific Plan, future project-specific environmental studies will be provided." The EIR should state clearly that each development plan will have to undergo full CEQA review from an Initial Study leading to the preparation of a separate, project-specific EIR. The program-level approval of the Specific Plan does not in any way obviate the need for full discretionary review of each phase of the project.

For clarity, I have organized my comments into two separate sections: (1) deficiencies in the overall analysis or "Program EIR" and (2) deficiencies in the Phase 1 "project-level" analysis.

**I. DEFICIENCIES IN PROGRAM EIR ANALYSIS OF TOTAL PROJECT****A. Project Description:**

1. Assumption of Retirement and Seasonal Component of Project is Not Supported and Causes Understatement of Impacts

The project description is based on the totally unsupported assumption that 1,900 (38%) of the project's 5,000 units would be retirement or seasonal housing. This assumption is apparently based on a market study cited on p. IV-197 (Table IV.F-F) of the Draft EIR, but not included within the bibliography or in any appendix. The assumption of 1,900 retirement or seasonal units is not a valid basis for an EIR analysis since it is likely to result in an underestimation of many impacts.

In particular, retired persons make few or no work-related trips and are generally more sedentary than younger people. Retired and seasonal housing, as stated in the Draft EIR, does not generate school children. The smaller household size results in less use of water, and less production of sewage and solid waste. The EIR analysis based on the retirement and seasonal percentage is probably a significant underestimation the potential impacts of the project.

A new Draft EIR should be re-circulated which contains a "worst-case" project description that assumes that all of the project's residents are younger people in the work force. The project's impacts on traffic, air quality and public services cannot properly be evaluated unless the worst-case scenario has been included.

**2. Jobs/Housing Balance is Extremely Poor and Increases Project Impacts**

The Draft EIR states (p. III-5) that the project sponsor's objective is to "create a pace-setting destination resort and residential community providing quality of life balanced between residential living, employment and leisure time activities...". In this regard, the project as proposed fails to meet its stated objective.

On inspection, the proposed project turns out to be not a new town at all, but a huge subdivision whose residents will be required to commute out not only to work, but also for basic services. School children will be bussed 10 miles one way to junior high and high schools. The employment within the project is minimal and would comprise mostly low-wage service jobs such as golf caddies, grounds keepers, hotel clerks, and restaurant service workers. None of these workers could afford any of the housing in the project.

The proposed project would have at buildout a residential population of about 13,500 in 5,000 dwelling units, but would create only about 1,600 nominal jobs (the 370 "work at homes" is not considered project-generated employment). The current Stanislaus County workers per household is 1.33., based on SAAG and Stanislaus County Economic Development Corporation (SCEDCO) data. At this rate, the 5,000 dwelling units would produce 6,650 potential workers for an overall jobs/worker ratio of .24 (4 workers for every job opportunity in the project. This is an abysmal ratio for a project of this magnitude in a remote location.

A balanced community, or a real "new town" would have a jobs/worker ratio close to 1:1. The non-residential component must include a mix of office/commercial, public service, industrial and other jobs that will match the household incomes of families able to afford the housing in the project.

By attracting established companies to relocate corporate offices or open new employment centers at the project there would be an incentive for existing employees of these companies to move to a place where they could walk or bicycle to work. A balanced new town would also provide all basic services within walking or shuttle distance of home and eliminate the need to use private automobiles for most purposes.

A typical standard would be 500 square feet of space per office or retail job and 1,000 square feet for industrial jobs. A balanced project would therefore include for 2,500 residential units ( x 1.3 workers/unit = 3,250 workers) x 750 square feet (average) per worker = 2,437,500 square feet of employment space.

The EIR states that the distribution of residential offerings in the project would be as follows:

2,940 estate lots selling for \$300,000 - \$1,000,000+  
1,010 "duets" and "z-lot" homes selling for \$170,000 - \$300,000  
1,050 condominium units selling for \$150,000 - \$250,000

The following analysis shows the family income level necessary to purchase homes in these price ranges.

HOUSE PRICE	MORTGAGE <sup>a</sup>	MONTHLY PAYMENT <sup>b</sup>	ANNUAL PAYMENT	ANNUAL HOUSEHOLD INCOME TO AFFORD THIS HOUSE <sup>c</sup>
\$100,000	\$80,000	\$811	\$9,732	\$32,440
\$150,000 <sup>d</sup>	\$120,000	\$1,216	\$14,598	\$48,660
\$170,000	\$136,000	\$1,378	\$16,544	\$55,148
\$250,000	\$200,000	\$2,028	\$24,330	\$81,100
\$300,000	\$240,000	\$2,432	\$29,196	\$97,320
\$1,000,000	\$800,000	\$8,110	\$97,320	\$324,400

<sup>a</sup> Assumes 20% down,

<sup>b</sup> Assumes variable rate mortgage averaging 9% for 30 years, taxes at 2% of house market value per year.

<sup>c</sup> Assumes 30% of gross income goes for mortgage and taxes.

<sup>d</sup> Least expensive unit in the project

Based on the hypothetical description given in the Draft EIR, nearly 60% of the units in the project would be affordable only to families earning over \$97,320 per year. The least expensive units in the project would require a household income of almost \$50,000 per year. Many of the "jobs" within the project would pay less than \$20,000 per year. Therefore, the expectation is that most of the 1,600 jobs in the project would be filled by low-income people living outside the project, possibly from Patterson or as far away as Modesto or Merced. The project residents would all commute long distances to work, many to Alameda or Contra Costa Counties, based on data from the California Department of Motor Vehicles, showing the prior address of people to have moved to Stanislaus County.

The EIR should include an analysis of a true "Mitigated Project" which has been restructured to provide the balance of jobs and housing to make it



function as a self-sufficient new town. I provide further discussion of this issue under my comments regarding the Alternatives section of the Draft EIR.

3. Overall Lack of a Fiscal Analysis Means that Mitigation has not been Demonstrated to be Feasible.

For a project the magnitude of the Diablo Grande proposal, the EIR is seriously deficient in not containing a fiscal analysis showing how all of the public service and road improvements needed to accommodate the project or mitigate its impacts are to be financed. In many instances the EIR simply states that the project applicant will mitigate the impacts, but fails to explain how.

The EIR must be supported by a comprehensive fiscal analysis in order to demonstrate that the mitigation is feasible and will be implemented. While CEQA does not specifically require the consideration of economic issues, the purpose of a fiscal analysis is to evaluate physical impacts whose mitigation may be accomplished through fiscal means. The demand for public services and infrastructure produces a physical impact in that it requires construction of new facilities. The physical facilities also have a public cost which is an impact on local government.

The developer can mitigate the impact in only one of two ways: either the developer must pay for and construct the infrastructure directly, or the developer must make a fiscal contribution to the agency who will construct the facilities. If the project proponent does not pay its fair share of new infrastructure cost, then either the facilities do not get built and there is a degradation in service for the rest of the population (e.g. traffic congestion), or the burden of paying for the facilities falls on the rest of the taxpayers. A degradation in service is a physical and social impact. Increased taxation is a both an economic and social impact.

Therefore, an EIR on a project of this kind must provide a fiscal analysis showing how the significant demands on public service systems will be mitigated, and demonstrating that the developer of the project will pay the full cost of the impact the project will cause. Most importantly, the analysis must show the capital cost of facilities improvements and how these will be financed. It is not enough to show the revenues and costs to local government that will be produced once a project is built. The end-point description fails to show the negative revenue balance for local government during the initial period of building new service facilities.

The elements of infrastructure cost that should be included in this EIR are:

Road and Highways

- road widenings, including freeway lanes
- intersection improvements, and signalization
- changes in grade crossings for rail or utilities
- signalization and safety improvements
- transit improvements
- freeway interchanges

Potable Water Service

- improvements needed to increase water supply from the source, such as wells, pumps, pipelines, aqueducts
- water treatment facilities needed by the provider, or expansions thereof

water distribution and storage facilities from the provider to the project such as pipelines, pump stations, reservoirs, tanks etc.

Wastewater Disposal

wastewater treatment, conveyance and disposal facilities  
additional requirements for sludge treatment, processing,  
conveyance and disposal

Storm Drainage

storm drains, including offsite improvements  
stormwater detention facilities, onsite and offsite  
onsite and offsite creek and channel improvements needed to serve  
the project  
additional pollution control equipment needed onsite and offsite

Schools

land acquisition  
new facilities construction to school district standards

Fire and Police Protection

new equipment needed to serve the project including buildings,  
vehicles and special-purpose equipment  
additional manpower to serve the project

Other Public Facilities Costs Created by Project

community facilities, libraries  
public hospital  
public service administration (social services, district attorney  
etc.)

B. Land Use Plans and Regulations Analysis Incomplete

1. No Analysis of Williamson Act Cancellation Findings

The Draft EIR states (p. IV-3) that the entire project site is currently under a Williamson Act contract. In order to cancel a Williamson Act contract, the County must make multiple findings regarding the project. The Draft EIR lists the criteria, but contains no analysis of the relationship of the project to the criteria. The EIR must provide an analysis of the relationship of the project to each criterion to support the Williamson Act cancellation decision.

It appears that the project would fail to meet all of the test criteria for cancellation. The criteria are listed in *italics*, and an analysis is given below each criterion listed.

A notice of non-renewal has been filed

Analysis: The EIR does not state that any of the landowners/contract holders have applied for non-renewal or when the current contracts would expire.

5 (Cont'd)

*Cancellation is not likely to result in the removal of adjacent lands from agricultural use.*

Analysis: Since the project would be growth-inducing and would introduce urban land uses into a rural area, the project could very likely result in the removal of adjacent lands from agriculture.

*Cancellation is for an alternative use consistent with the applicable provisions of the city or county plan*

Analysis: In fact, the EIR analysis in Chapter IV.A. shows the project to be inconsistent with many provisions of the County General Plan.

*Cancellation would not result in discontinuous patterns of urban development*

Analysis: The site is a least 7 miles from the community of Patterson. The project would inject a large, urban project into an area that is substantially remote from all existing urban development in the County. The project would definitely result in a discontinuous pattern of urban development.

*No proximate, non-contracted land is both available and suitable for the proposed specified use that would provide more contiguous patterns of urban development*

Analysis: The Draft EIR selects for analysis three other sites, all of which would result in conversion of agricultural land of value equal to or greater than the site. The development of any of these other sites would also be inconsistent with the goals and objectives of the Williamson Act. In order to be consistent with the Williamson Act, the "proposed use" should be considered residential, commercial and office uses rather than an identical development proposal when examining the availability of other lands. The EIR has failed to analyze the potential for development in areas currently zoned for development within the incorporated boundaries or Spheres of Influence of existing cities.

*Other public benefits substantially outweigh the objectives of the Act.*

Analysis: The EIR provides no information that would demonstrate that this is the case. The project would have unavoidable adverse impacts on scarce resources (water) and air quality. There is no fiscal analysis to demonstrate that any of the project's impacts to the transportation system or other infrastructure will be mitigated. There is no fiscal analysis to show that the project in Phase 1 or at full buildout will produce a net surplus of public revenue.

## **2. Other Effects on Agriculture Should Be Discussed**

Although the project site itself contains very little prime agricultural land, the impact of water withdrawal from the so-called "well sites" may impact prime agricultural land. If the water from these sites is piped to the project rather than being used for agriculture, then agriculture may have to be discontinued on these sites. The EIR should discuss the impacts of taking the agricultural land on the 310-acre well sites out of production. The EIR should discuss the type of crops grown there now, the crop value, and the proportional impact to Stanislaus County of ceasing production on these sites.

In addition, the social impacts of the project can affect agriculture in the rest of Stanislaus County. The traditional economy of Stanislaus County

has been based on agriculture, with a total economic value in 1991 of more than \$3.3 billion, and accounted for more than one-third of the County's employment. (Stanislaus County Draft Agricultural Element, 12/91). The importance of preserving agriculture only increases as the U.S. and world population expands. Urban development encroaches on agriculture in the county in more ways than direct land conversion and air pollution.

The social and political implications of cumulative urban growth on the continued viability of agriculture in the County should be addressed. The population of the project site will alone represent 7.5% of the present population of Stanislaus County. This new population will have non-agricultural employment; many will commute out of the County to work. The new residents will have no or little tie with traditional agriculture in the County, their economic interest and orientation will lie elsewhere.

Equally important, as a new social element these new residents will comprise a potent political force in the County which may reject the farmers' arguments regarding the need to protect their operations and right to practices such as aerial crop spraying. The increasing conflict between traditional farming and encroaching urban uses may well accelerate the conversion of remaining lands. The EIR should include a discussion of the effect on agriculture of a major new population component which has no ties to the traditional agricultural base of Stanislaus County.

### 3. Policies and Permit Requirements of Responsible Agencies Not Discussed

The Draft EIR discusses the relationship of the project to the Stanislaus County General Plan policies, but fails to include a discussion of the policies, permitting and mitigation requirements of other responsible agencies. The Draft EIR lists other agencies that may have permitting authority over the project, including the California Department of Fish and Game, Regional Water Quality Control Board, California Department of Health Services and the U.S. Army Corps of Engineers. Unless the EIR contains a discussion of the policies and mitigation requirements of each of these agencies as they relate to the project, it will be impossible for the agencies involved to make the determination that project impacts have been adequately mitigated according to the standards set by that agency. The EIR must be revised to contain an analysis of the mitigation and permit requirements of each agency and the performance standards which that agency sets.

Since the EIR does not contain a wetland delineation or indicate whether the project will have to apply to the Corps of Engineers for a fill permit under Section 404 of the Clean Water Act, a determination cannot be made whether there is federal involvement in the project. This determination is necessary to show whether the endangered species impacts will have to be mitigated according to Section 7 or according to Sections 9 and 10 of the Endangered Species Act. Section 7 applies when there is federal involvement and Sections 9 and 10 when only private action is involved. The procedural requirements differ substantially between the two processes.

If Section 7 applies, then the Corps will have to consult with the USFWS, and have prepared a Biological Assessment, Mitigation Plan and Conservation Agreement in support of a Biological Opinion by the USFWS. If the Service accepts the mitigation, then a No-Jeopardy Biological Opinion can be issued. Otherwise, if the Opinion indicates Jeopardy, then the Corps must reject the application for a fill permit. The project cannot then proceed further unless it is modified so as not to affect the endangered species or its habitat.

## C. Biology

The description of biological impacts in the DEIR does not comply with CEQA Guidelines 15126 (a), which states that "An EIR shall identify and focus on the significant environmental effects of the proposed project. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. ..." Although the DEIR states that biological impacts of the project would be significant, it fails to adequately identify and describe the impacts.

## 1. The Impacts to Vegetation and Habitats of Special Concern Are Not Adequately Described

The DEIR indicates that there are eight habitat types at the project site, four of which are "habitats of special concern". However, the DEIR does not contain a map of the vegetation or any indication of how many acres of each of these habitat types would be disturbed under the Overall Site Plan. It is not possible for the reader to understand the impact the project would have on biological resources. The EIR must include a map of project site vegetation and an analysis of how many acres of each habitat type would be affected by the Overall Site Plan.

## 2. The DEIR Does Not Assess the Impacts to Plant Species of Concern

The DEIR identifies eleven rare plant species which may occur on the overall site, however there is no indication that specific field surveys were conducted to determine the presence of any of these species at the project site. The DEIR indicates that a two day survey was conducted in the overall site area on April 26 and 27, 1990 (page IV-97). The overall site area is 29,500 acres in size, and a two-day April survey would not be adequate to determine if these rare plant species occur at the site. Considering that the initial site survey was done in 1990 and the DEIR was not published until August 1992, it appears that surveys for plant species of concern could have been conducted in the interim. The surveys would have to be conducted at the proper time of year when each species was expected to be blooming. Multiple surveys are probably necessary.

The DEIR does not assess the specific impacts of the overall site development on rare plant species of concern, and in this regard fails to inform the decision-makers of the possible adverse impacts of the project. According to the DEIR (pp IV-109 to IV-113), the potential habitats for these plants include serpentine soils, thin rocky soils, dry ravines, grassland or alkaline soils associated with site drainages, stream valleys with heavier soils, valley and foothill grasslands, a digger pine and grassland association, and rocky places in chaparral and foothill woodland communities. But the only assessment of impacts to rare plants for the overall site contained in this Draft EIR is,

"The serpentine outcrop present near the western boundary of the project site in the Wilcox Ridge Conservation Area may support populations of plant species of special concern. Planned trail access in this area could result in threats to these populations." (pg IV-123).

The DEIR must include specific surveys for these species of concern in appropriate habitat during the bloom period for each plant. If the species is encountered, then mitigation must be developed for each affected species.

3. The DEIR Does Not Assess Impacts to Loggerhead Shrike and Horned Lark, Federal Candidate 2 Species

The DEIR indicates that Loggerhead shrike and Horned lark occur on the site (pp IV-106, IV-108). These birds are currently listed by the US Fish and Wildlife Service as Candidate 2 species, and are under consideration for listing as Threatened or Endangered. The DEIR must address the potential impacts of development of the overall site on these species of concern, and develop mitigation for these impacts.

4. The Potential Impacts to the Endangered San Joaquin Kit Fox Are Not Adequately Addressed

Although the entire site is in the range for San Joaquin kit fox, there is no map which indicates how much of the overall site contains potential denning and foraging habitat for the kit fox. The DEIR does not explain how many acres of kit fox habitat would be removed for the project, and whether development under this Specific Plan, a plan which addresses an area of 46 square miles, would result in take of this species.

5. Mitigation Measures for the San Joaquin Kit Fox are Incomplete

The mitigation measures in the DEIR are too limited and do not provide assurance that take of the species will be avoided or minimized. The mitigation measures for San Joaquin kit fox for the overall site are to "conduct surveys for the fox in the lowland areas between Interstate 5 and the foothills of the Orestimba and Crow Creek access road corridors prior to the consideration of development plans for Villages 4 and 5"; and to provide road undercrossings every quarter-mile and fencing of a particular size in areas of kit fox habitat.

The DEIR must explain what specific measures are available to reduce or avoid take of this species during construction and operation of this project. The EIR must explain whether these measures are feasible for the project, and whether mitigation that may be required by the US Fish and Wildlife Service and the California Department of Fish and Game might result in changes to the project.

6. The Cumulative Impacts to Species of Concern, Including San Joaquin Kit Fox, Are Not Assessed in Great Enough Detail

The cumulative impacts of this development in concert with regional development in both Stanislaus and San Joaquin counties on San Joaquin Kit Fox are not addressed. The cumulative impacts of development in the animal's range are why it is listed as an Endangered species, and why the habitat along the edges of the San Joaquin Valley has grown in importance to the survival of the species. This Specific Plan is located in habitat at the edge of the valley, and addresses a very large area of 29,500 acres. The DEIR must describe what other major developments are occurring regionally which potentially affect the San Joaquin kit fox and specifically how the Diablo Grande project contributes to this cumulative impact.

This comment is pertinent to the other species of concern at the project site as well; the EIR must address the cumulative impacts to each of these species separately if the reviewer is to be able to understand the ramifications of developing this site.

7. **The Importance of This Site as a Potential Corridor Connecting Kit Fox Habitat to the North and South is Not Demonstrated in the DEIR**

There is one map of the site relative to kit fox range in the report in Appendix D, but there are no maps showing where possible corridor routes are across the project site, and specifically how those corridors may connect with other suitable habitat in kit fox range in all directions from the site, but particularly in the north-south direction. In order for the reviewer to clearly understand the impacts of the project, the DEIR must demonstrate exactly how development of the site might affect wildlife corridors, particularly for the San Joaquin kit fox.

8. **A Wetland Delineation Must be Done of Riparian Areas and Springs**

The EIR contains no map of the extent of vegetation types. However, there are riparian areas, stock ponds and springs which may qualify as wetlands (p. IV-100). The extent of these areas on the project site, or the areas that will be directly affected by the project, are not described.

A wetland delineation, using the Unified Federal Method, must be done to determine whether there is US Army Corps of Engineers (USACE) jurisdiction on the site, which is also important to determine whether Endangered Species impacts must be mitigated per Section 7 or Section 10(a) of the Endangered Species Act. If there are wetlands in excess of 1 acre to be affected by the project, then USACE jurisdiction applies. If more than 10 acres of wetlands or "waters of the United States" would be impacted by project activities, then the project would require an individual permit under Section 404 of the Clean Water Act, and the USACE could require a NEPA document (EIS or EA) be prepared to evaluate the impacts.

D. **Public Services**

1. **Water**

a. **Water from state water project unlikely**

The State of California Resources Agency's annual report Management of the California State Water Project (1990 and 1992) states that the firm yield of the existing SWP facilities is approximately 2.4 million acre-feet per year. Since 1987, contractor requests for entitlements have exceeded this amount. The latest amounts requested were 3.86 million acre-feet in 1990, and the total amount that existing contractors may request through existing entitlements is 4.16 million acre-feet. Therefore, there is already a gap of 1.4 million acre-feet between existing requests and current supply and a gap of 1.76 million acre-feet between available supply and current maximum entitlements.

Clearly, the SWP does not have enough water to serve future projects such as Diablo Grande if the SWP cannot even meet its existing demand on the system. California is now in its 7th year of drought with no sign of the drought easing. Water supplies for the state are dwindling, not increasing. There is not enough water to meet the needs of existing urban and agricultural consumers, let alone allow for new, massive consumers.

The simple assertion that future phases of the project will buy water from the SWP is a major deficiency of the EIR. The promise to solve the problem at a future date is not a demonstration that a water supply is now or will ever be available for this project.

If the project expects to purchase water from the SWP then the EIR must contain a complete analysis of the water demand from each and all phases of the project compared to the projected water supplies of the SWP. The EIR must contain a discussion of the State's own analysis of its water supply future and its ability to serve existing and new customers in the future. The EIR must examine the State's prospects for dealing with the long-term drought and increasing its storage and delivery capabilities in the face of the long-term drought.

b. Water use from project is incorrect and does not include best mitigation.

The Draft EIR estimates of water use from the project understate the water use component of the residential component and overstate the use component for open space (Table IV.F-A, p. IV-169). The Draft EIR lists a water use component for employees of the commercial areas, but appears to have omitted any calculation of water use for hotel guests and restaurants. The number of rooms in the hotel (estimated in the EIR as 200 - 250, p. III-15) must be corrected for occupancy rate, and the number of meals (patrons) per day per restaurant should be estimated. The appropriate water use factors should be applied to these land uses. Typical water use factors for hotel rooms are 60 gallons per day per guest and 10 gallons per day per restaurant patron. At 250 rooms and 60 gallons/per day per guest, full, double occupancy of the hotel would use 30,000 gallons/day or 33.6 acre-feet/year.

It also appears that the EIR uses the wrong factor for estimating residential water use -- 275 gallons is not per capita per day but per dwelling unit per day, which is a typical urban water use figure for Stanislaus County. The correct computation which should be incorporated in the revised EIR analysis would then be 5,000 dwelling units x 275 gallons/DU/day = 1.375 mgd or 1,540 acre-feet/year.

The water use allowance of 6 acre-feet/acre/year for the open space area is excessive for the foothills of Stanislaus County. This amounts to 6 feet of water applied to every acre of open space, over and above the 10 inches of rain received, and results in a water demand on 1,439 acres of 8,634 acre-feet/year. The basis for this water use factor is not stated, but presumably accounts for demand of vegetation plus evaporation in a dry climate, and would be necessary to support a lush, green lawn such as would be expected for a golf course in the southeastern United States.

The lush green lawn water use factor seems unreasonable for a project in arid Stanislaus County, and is contradicted by the EIR itself. The EIR states as mitigation that drought-tolerant vegetation should be planted. Clearly, low ground covers and succulents would not use 6 acre-feet of water/acre/year. Considering the critical need to reduce water use, the EIR should include additional mitigation such as the maximal use of the native vegetation which already exists on the site, and is by definition, drought-tolerant.

The project's four proposed golf courses would use excessive amounts of water approaching the 6 - 7 acre-feet/acre/year. The 300 acres of conventional golf course should be replaced by either no golf course or a Scottish links type course which uses natural terrain except for the small areas of tees and greens. A links type course design could reduce golf course water use by about 30%.

The Draft EIR should also correct a puzzling contradiction. The EIR states (p. IV-181) that excess tertiary sewage effluent is proposed to be discharged to the creeks. Since the projected volume of wastewater (2,240 acre-feet/year) is only one-fourth of the 8,634 acre-feet/year projected to be

(Cont'd)

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needed for open space irrigation, why is there a surplus of wastewater to be discharged to creeks?

c. EIR should consider impacts of water storage reservoirs

The EIR states (p. IV-177) the project will require 6.9 million gallons of water storage in three zones. This will entail construction of several storage reservoirs of several acres apiece. The EIR should consider the impacts of the water storage reservoirs, including seismic safety, public safety (drowning), public health (mosquito breeding), and their mitigation.

d. EIR should consider water use during grading

The EIR lists as "standard" air quality mitigation (p. IV-297) that dust emissions during grading will be controlled by "sufficiently watering all excavated or graded material". The EIR further states (p. IV-59) that for Phase 1 alone, approximately 2.5 million cubic yards of earth will be graded. The EIR should address the volume of water that will be necessary to provide dust control for 2.5 million cubic yards. Additional water is required for proper compaction of the fill material.

Very little water is available onsite either as surface or groundwater. The EIR needs to explain how much water will be required for dust control and compaction during grading, what the source of the water will be, and where the water will be stored. If the water is proposed to come from onsite wells, then the EIR must evaluate how the water will be supplied to water trucks from the wells.

3. Wastewater Disposal

a. Discussion does not consider sewage and water system sludges

The Draft EIR states (p. IV-172) that the operation of water filtration plants would generate 16,000 tons per year of alum sludge which would be "landfilled off-site". The project would also produce, according to p. IV-184, about 30,000 tons per year of sewage sludge. The EIR states:

"If the sludge from the wastewater treatment plant could be disposed of by some method other than landfilling (e.g. composting) Diablo Grande's contribution to County solid waste would be reduced..."

Sewage sludge is now classified as a hazardous waste and the U.S. EPA is still developing the implementation and safety guidelines to regulate its reuse and disposal. Existing landfills are increasingly reluctant to accept sewage sludges because of their high water content and content of hazardous substances, including heavy metals, chlorinated organic compounds and pathogenic organisms. It is possible that no realistic option for sludge disposal for the project may exist.

The Draft EIR makes the undocumented assumption that sites for landfilling of its sludge would be available. The EIR must provide much more information to show that the disposal of this volume of sludge is feasible. The EIR should characterize the sludges that the project is expected to produce in terms of what quantities of hazardous materials they may contain based on the type of land uses which will contribute wastewater to the sewage treatment plants. The EIR must identify the sites where the sludge is proposed to be landfilled, and demonstrate that the landfill operator (private or county) has agreed to accept this volume of sludge from this project.

4. Schools

a. Child generation is underestimated

The project EIR underestimates the potential school child generation from the project for both Phase 1 and for the entire project. The school child generation figures and corresponding impacts should be recalculated based on the assumption that there are no retirement or seasonal units in the project, and that all of the units are capable of generating school children.

b. School impacts not mitigated

The school impacts of the project are not mitigated. Not a single new school within the property is proposed. The EIR states (p. IV-198) that

"Students from the project could attend one of seven elementary schools and the junior high school and high school proposed by the Lakeborough project."

This is not mitigation of school impacts. First, Lakeborough Project may never be built. Second, even if built, the purpose of the schools within the Lakeborough project is to serve the students generated from that project. At a construction cost of \$10,000 to over \$20,000 per student, the Lakeborough project is not likely to build excess capacity to serve students in another project.

As discussed below under the Phase 1 project, bussing junior high and high school students to Yolo elementary school and Orestimba high school in Newman is not adequate mitigation. These schools do not have capacity to take the project's students and the distances from the project are so great that bussing may be infeasible.

As discussed below for Phase 1, the state-mandated impact fee will fall short by a factor of 3 or more to pay for new school facilities. Because of the remote location and size of the project site, the only reasonable mitigation is to build schools within the project site to house all of the project's students. The EIR must completely re-analyze the issue of school mitigation to develop a practical solution. The school district should be consulted. Any real solution will require a full commitment of developer financing in the event that other financing is not readily available.

Recent court decisions permit school districts to require full mitigation of school facilities impacts. The County also has broad authority to withhold approval of a General Plan Amendment until the school financing issue has been completely resolved.

There are other compelling reasons why the lack of discussion of school financing for full mitigation is a major deficiency of the EIR. State funds for school construction, including those from recently passed bond issues, are all fully committed to existing projects. The State Office of Local Assistance reported that the current backlog of school facilities in the state is increasing at the rate of \$100 million per month, and to keep up with statewide school facilities demand, school districts throughout the state would have to build 3 schools per week for the next 10 years. Based on a report from local school district sources it also appears that due to the state's budgetary crisis, no further school bond issues will be on the ballot for the foreseeable future. Therefore, the full burden of funding for new schools will have to fall on the local school districts.

The EIR should fully discuss the issue of school impact mitigation. The discussion should present a complete fiscal analysis of school construction capital costs, and operating cost, and explain the mechanisms available to the developer to finance the needed facilities. The developer may either directly construct the schools as part of the project, dedicating the land to the school district, or may pay an equivalent fee to the school district for school construction. A mitigation agreement between the developer and the school district should be a condition of project approval.

The actual costs for new schools are in the neighborhood of \$40 million per high school (\$20,000 per student), \$20 million for a middle school (\$23,500 per student) and \$6 million for an elementary school (\$9,230 per student). At the school child generation rates given in the Draft EIR (p. IV-198), the cost per unit of providing school facilities for the project would average out to \$10,318 per unit. The state-mandated impact fee for a 2,000 square-foot unit would be \$3,160 (or less than 1/3 of the amount required), and for a 1,200-square-foot unit would be \$1,896, or 18% of the amount required to fully mitigate the impacts.

## 5. Fire

### a. Fire impact mitigation is inadequate and inadequately described

The Draft EIR states (p. IV-188) that "Wildfire fuel reduction prescriptions should be adhered to as outlined in the Land Use Section of this EIR." But the Land Use section contains no description of such fuel reduction prescriptions. The Draft EIR describes wildlife hazard on the property in several places (e.g. p. IV-10 through IV-11, p. IV-12, p. IV-29, p. IV-34). The discussion on p. IV-12 states that "the Phase 1 site has the County's highest possible annual critical wildfire weather frequency." The discussion on p. IV-29 makes reference to a fuel reduction plan (FRP) but no such fuel reduction plan is described in the EIR. The section on Topical Issues and Impact Overview (Chapter V) does not even mention fire hazard as a significant impact, mitigated or unmitigated.

Fire hazard is an extremely important issue for a remote site in dry, wooded country. The Oakland Hills fire of 1991 was a recent demonstration of how deadly a wildfire in a population area can be. In that case there were numerous fire fighting units from a large urban area mobilized to fight the fire but they were unable to prevent catastrophic loss of life and property.

The EIR must contain a full discussion of all of the measures that would be necessary to reduce fire risk. Since the fuel reduction plan is apparently a key element of the mitigation, the fuel reduction plan must be developed and included in the Draft EIR for public review.

Any fuel reduction plan will have potentially significant biological impacts in addition to the impacts of vegetation removal for grading and for the development itself. The biological impacts of fuel reduction must be described in the EIR, including the acreage of trees and other vegetation that would be lost and the effects of this vegetation removal on wildlife.

### b. Fire station only committed to for Phase 1

The Draft EIR states (p. IV-187) that the project applicant proposes to construct a fire station in Phase 1, but that as many as three or four fire stations may be needed to adequately cover the response areas of the project. There is no indication that the Applicant is willing to commit to construct the additional fire stations that may be needed. In order for the Specific

Plan to be approved, the construction of the full number of fire stations should be made a mandatory condition of project approval.

D. Traffic

1. Project Impact is Understated

The project impact, in terms of trip generation, is understated because of the EIR's optimistic assumption about the high proportion of retirement and seasonal population. It explicitly states (p. IV-250) that the trip generation data computed for the project assume a certain resident composition (permanent, retirement, and seasonal). The analysis should be redone to reflect the "worst case" project where none of the residents were retired or seasonal.

2. Important Transportation System Links were Not Considered

The Draft EIR did not include an assessment of the project's impacts on at least two important roads: Del Puerto Canyon Road and Interstate 580. Del Puerto Canyon Road must be included in the traffic impact analysis because this road is the major "shortcut" linking the west Stanislaus County area with the Livermore valley. Many commuters and other drivers now use this road to avoid driving on the freeways, and there is every expectation that some proportion of Diablo Grande project residents would also use Del Puerto Canyon Road.

Del Puerto Canyon Road is a narrow, two-lane country road which includes areas of hazardous driving such as sharp or blind curves and areas of inadequate shoulders. The EIR analysis should include the impacts of increased traffic on this road as well as other related impacts of increased traffic such as public safety, noise, and air pollution (carbon monoxide).

Many of the 8,250 project trips listed as traveling north on I-5 north of Sperry Avenue (Figure IV.H-2) would be bound for I-580 toward the Livermore Valley or the Bay Area. Based on the analysis given in the recent Mountain House New Town EIR prepared for San Joaquin County, I-580 under cumulative impact conditions would experience LOS F at peak hour over several segments, even with maximum possible widening of the freeway. Under such circumstances, it is imperative that the Diablo Grande EIR analyze the impact of adding its component of traffic to I-580. It is also imperative that traffic mitigation fees collected from the Diablo Grande project include a pro rata amount for the Diablo Grande contribution to I-580 improvements.

3. Cumulative Impact Analysis is Incomplete and Leaves Out Many Projects

The cumulative impact analysis is stated (p. IV-254) to include the traffic from the following projects:

- 2010 buildout of the County General Plan and its incorporated cities
- Grayson Park
- Mapes Ranch
- Lakeborough project
- Patterson General Plan peak hour traffic adjustments

This analysis appears to omit several "new town" projects in Stanislaus County, including Mapes Ranch, North Salida, Boatwright Property, Del Rio Community Plan Update, Kaufman and Broad project, as well as numerous projects in San Joaquin County and Merced County (see Table 1). It is necessary for the EIR to consider which of these projects will impact particular portions of

the road system which will also receive impact from the Diablo Grande project. All such projects should be included in the cumulative impact assessments of traffic volumes and effects on levels of service.

#### 4. CalTrans Plans and Standards for I-5 Not Adequately Addressed

Interstate 5 is now a 4-lane rural highway with an 84-foot median. The traffic on I-5 doubled between 1980 and 1988, and the SAAG model used by CalTrans projects an increase from 23,100 ADT to 47,000 ADT by the year 2010. This growth will result in a degradation of service from B to D in the peak hour, unless the highway is widened to 6 lanes in the median before then, in which case the volume/capacity ratio would result in LOS C at that time.

CalTrans is updating their Route 5 concept report which projects future traffic volumes and levels of service along segments of I-5. Current traffic projections are based on the 1988 statewide traffic volumes manual which addresses all state and interstate highways. The CalTrans objective is to maintain LOS B on rural interstate highways such as I-5, and LOS D on urban freeways, such as Route 99 through the urban centers.

The CalTrans projections do not take into account any of the new towns on I-5, and do not prioritize I-5 improvements. For example, out of the \$1.25 billion of a \$18.5 billion measure on the June 1990 ballot earmarked for rural and inter-regional highways through the year 2000, no funds were included for Interstate 5 (D. Azevedo, pers. comm.).

The Lakeborough project EIR showed that for at least 15 miles north and south of the proposed project site, cumulative traffic on I-5 at the time of buildout of the Lakeborough project will be 64,200 to 70,600 ADT, resulting in LOS F (jammed or "gridlock" conditions) if the freeway is not widened beyond its present 4 lanes. If widened to 6 lanes, the freeway would operate at LOS C-D (p. 188 of DEIR) which is still below CalTrans acceptable standard. To approach LOS B, I-5 would have to be widened to 8 lanes. As stated above, CalTrans has no current plans to widen I-5 to even six lanes.

The Diablo Grande EIR appears to use a more optimistic (less conservative) methodology to compute level of service. The TJKM traffic analysis for the Lakeborough EIR assumed a 10% peak hour, a directional split of 66%/34% and 15% truck traffic. The assumptions used by Dowling Associates in the Diablo Grande Draft EIR are not stated. The following compares the level-of-service traffic volumes for the two analyses:

REPORT	AVERAGE DAILY TRAFFIC RESULT IN PEAK HOUR LEVEL OF SERVICE			
	4-LANE FREEWAY		6-LANE FREEWAY	
	LOS C	LOS D	LOS C	LOS D
TJKM (Lakeborough)	40,900	48,800	61,400	73,200
Dowling (Diablo Grande)	68,000	76,000	102,000	114,000

The Dowling Associates estimates of level-of-service appear to be optimistically high which results in an underestimation of the project's impacts, cumulative impacts, and the need for mitigation. The EIR must state the assumptions on which the higher level-of-service figures are based. If the EIR assessment is based on improper assumptions, then the analysis should

be redone to reflect a more conservative carrying capacity for the roads and freeways.

#### 5. Cost of Road System Mitigations Not Addressed

I-5 in Stanislaus County now has an 84-foot median reserved for future widening. The cost (in 1989 dollars) for providing one additional lane in each direction within an existing median is about \$2.5 million per mile. Thus to widen 28 miles of freeway in Stanislaus County would cost about \$70 million. Unless CalTrans re-assigns this project top priority, and the state's voters pass an additional ballot measure, the cost of this widening will have to be borne locally by the residents of Stanislaus County. If paid for by the existing population, each household would have to contribute about \$600 toward this road widening. The cost of widening to 8 lanes would be double these amounts.

Since, according to the Draft EIR, the project will contribute up to 13.7% of the cumulative traffic on I-5 in Stanislaus County with San Joaquin County, the project should contribute up to 13.7% of the \$70 million towards road widening to six lanes (\$9.6 million). If widening to 8 lanes is necessary to maintain adequate levels of service, the project would also have to pay a pro rata portion of the second \$70 million.

#### E. Air Quality

##### a. Air quality mitigation is inadequate

The air quality impacts of the project, as described, are highly significant and unavoidable. As listed in Table IV.I-D the emissions levels from Phase I of the project alone are 4 to 7 times the significance threshold for ROG and NOx emissions, and the levels of the full project are 9 to 19 times the significance thresholds for these pollutants!

The California Clean Air Act of 1988 mandated a 5% annual reduction in each of the pollutants for which air basins were in non-attainment with clean air standards, until such time as the standards could be achieved and maintained. Stanislaus County is non-attainment for ozone (caused by reactive organic gases and nitrogen oxides) and particulate matter less than 10 microns in diameter (PM10). The Act requires that all conceivable means be used to achieve such reductions.

The air impact mitigation measures as outlined in the Draft EIR are totally inadequate to achieve air quality impact mitigation. The suggestion that the applicant

"develop a transportation plan that would promote the use of and offer incentives for ridesharing and transit"

is completely vague and speculative. The EIR should explain specifically what measures would promote the use of or offer incentives for ridesharing and transit. The EIR should show how the applicant or the county would be responsible for implementing and enforcing such a plan.

The EIR states that the project should provide a "link to existing regional mass transit systems." Such mass transit systems provide only a minute fractional improvement in air quality. With the project's remote location, a link to regional mass transit would still require long travel distances to connect to the mass transit. More importantly, a detailed analysis by the San Joaquin Valley Unified Air Pollution Control District in

the 1991 Air Quality Attainment Plan showed that the *maximum possible* implementation of all Transportation Control Measures would reduce countywide ROG emissions by only the following amounts

ROG emissions by .44 tons/day out of 37 tons = 1.2%  
Nox emissions by .41 tons/day out of 39 tons/day = 1%  
CO emissions by 5 tons/day out of 193 tons/day = 2.6%

Some so-called TCM's such as alternate work schedules and park-and-ride lots would have no effect whatsoever on reducing air emissions, according to the Air Quality Attainment Plan. The District's own analysis shows that TCM programs are largely worthless in reducing air emissions. The impact comes from the basic travel patterns of the total population. Unless this is altered drastically, there is no real hope of improving air quality in the basin.

The project as currently proposed will violate the mandate of both the federal and state Clean Air Act by making it more difficult to achieve any reduction in basin air emissions. Because of its remote location and its function as nothing other than a huge bedroom community commuting to the Bay Area, the project will contribute *disproportionately* to increasing basin air emissions. The project will directly frustrate the public effort to improve air quality.

It is therefore imperative that the EIR consider in detail a balanced project alternative, as described below under my comments on the Alternatives section of the Draft EIR. A balanced project alternative offers the greatest potential to reduce the level of traffic and air and energy use compared to the proposed project.

The EIR should also discuss the relationship of the proposed project the 1991 San Joaquin Valley Air Basin Air Quality Attainment Plan (adopted January 1992). In particular, the EIR should discuss the New and Modified Indirect Source Review rule, scheduled for adoption originally in fall 1992. This rule would require both onsite and offsite mitigation measures including the payment of a mitigation fee to fund emission control programs.

- b. Air emissions are probably underestimated; the derivation of emissions should be shown

There is reason to believe that the emissions as shown in the Draft EIR are an underestimation of the actual emissions. The reasons are: (1) the unsupported assumption that 38% of the project's residents would be retired, and would not commute; and (2) an estimate of average trip length that may be too short, considering the remote location of the project and the likely place of employment of its residents.

The Draft EIR (Table IV.I-D, p. IV-294) states that the emissions from project-generated vehicle trips were determined using the CARB URBEMIS 3 model, and emissions from stationary sources were generated using Bay Area AQMD factors. This is not sufficient documentation for the analysis. The assumptions and factors used in the analysis must be shown, either in the main text, or in an Air Quality Appendix to allow independent verification of the methodology and assumptions. These factors include:

estimated number and length of trips for all components of the project, including residents, employees, hotel guests, service and delivery vehicles

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(Cont'd)

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percentage of trips assumed to be commute trips to work vs. other trips

list of components which are supposed to contribute to stationary source emissions, with pollutant generation factors for each

F. Cumulative Impact

a. Discussion is superficial and non-quantitative

The discussion of cumulative impacts, as detailed elsewhere throughout these comments, is superficial and non-quantitative. The discussion does not reflect regional issues and the planning that is going on in Stanislaus County and with neighboring counties to deal with regional growth problems.

The Draft EIR (Table V.G-A, p. V-9) lists 7 projects which are presumably included in the cumulative impact assessment. These projects are described quantitatively in terms of numbers of acres, units and square feet of commercial/industrial development. Yet none of this quantitative information is used in the discussion of impacts. There is also no map showing the location of the other projects in relation to the Diablo Grande Project. The EIR should contain such a map. The map should show not only the location of the project sites, but the service district boundaries, such as school district, air pollution control district, fire protection district etc. The service district boundaries provide a context for which other projects would impact the same districts as the proposed project.

Examples of the types of quantitative comparisons that should be included in the cumulative impact discussion include:

- cumulative number of school children generated at each grade level
- cumulative demand for potable water and irrigation water, in gallons per day and acre-feet/year
- cumulative wastewater generation
- cumulative solid waste generation
- cumulative land use consumption, including acres of Williamson Act contracted land and acres of prime agricultural land affected by cumulative development
- Cumulative demand for fire and police services
- Cumulative acreage of each habitat type affected
- Cumulative impacts to endangered species, especially San Joaquin kit fox

The cumulative impact discussion should include secondary effects. For example, on p. V-12 there is the statement that

"Withdrawal and transport of water from the California Aqueduct, the Delta-Mendota Canal, and/or from other areas could cumulatively impact water quantity and quality at the location from which water is withdrawn. This would be a cumulative impact not only on urban and agricultural uses but also on fisheries and wildlife resources."

This conveys no real information about the effects of the water withdrawals. The EIR should describe more specifically the types of impacts expected from additional withdrawals from the Bay/Delta system such as salt water intrusion into the Delta, loss of particular, sensitive species such as the Delta smelt, striped bass and steelhead trout. The discussion should



address the need to create additional water storage reservoirs, such as the Los Banos Grandes facilities, which will inundate endangered species habitat. The EIR should also discuss the effects of cumulative withdrawals of groundwater on groundwater overdraft and subsidence problems in the San Joaquin Valley.

b. The discussion omits many projects contributing to cumulative impact

In addition to the projects listed in Table V.G-A, there are a large number of other projects which will contribute, to varying degrees, to cumulative impact of the Diablo Grande project. These projects are listed in the attached table (Table 1). The discussion of cumulative impacts in the Diablo Grande EIR should be expanded to include all of the relevant projects.

The cumulative impact discussion should provide the proper context for each type of cumulative impact. For example, for school impacts, the context for facilities impacts should be all projects within the Newman-Crows Landing USD. For school funding, statewide projects are relevant if state funding is sought. For water demand, cumulative assessments should include all projects drawing water from the same aquifers (for local impacts) and all projects competing for water from the State Water Project. All of the projects which share the major road system, including the freeways I-5 and I-580 should be included in the assessment of cumulative traffic impacts. All projects within the regional air shed should be included in cumulative air impact assessment.

G. Alternatives

a. The "mitigated" project alternative is a straw man and is inadequately analyzed.

The alternatives analysis contains an inadequate presentation of a mitigated alternative. The General Plan Buildout Alternative was found to be the environmentally superior alternative, as required by CEQA. However, this alternative would clearly not meet the applicant's objectives and would be rejected.

The so-called "mitigated" alternative described in the Draft EIR is a straw man. It appears to be a completely contrived alternative with no explanation as to why elimination of the 100 estate units from Conservation Areas, elimination of units from areas greater than 25% slope and removal of the cul-de-sac areas east of Oak Flat Parkway constitutes full mitigation of the project's impacts.

There is no analysis showing what effect these changes would have on the definition of the project as currently proposed. How many units would be eliminated from Phase 1? How many units would be removed from the total project? The EIR should contain a map showing what areas would not be developed if these modifications were made a part of the project. The EIR should also contain tables similar to Table III.D-C giving a full breakdown of how the "mitigated" project should be structured.

The analysis given of the so-called "mitigated" alternative is completely superficial and non-quantitative. One sentence would contain the information content of all of pages VI-9 through VI-12, as follows: "Implementation of the mitigated alternative would reduce some of the impacts of the proposed project." A real comparison of the "mitigated" project with the proposed project must show, in numerical terms where possible, what impacts of the proposed project would be reduced or eliminated.

Once the EIR has listed the components of the mitigated project in tables and illustrated the "mitigated" project on a map, the EIR should analyze the quantitative reduction in impact on each environmental factor that would result from the "mitigated" project. Factors to be compared quantitatively with the proposed project include:

- amount of grading required
- stormwater runoff and impervious surface
- vegetation removal
- endangered species habitat affected
- vehicle trip generation
- air emissions
- water demand for domestic purposes and irrigation
- wastewater generation
- school child generation

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(Cont'd)

**h. The EIR should analyze a restructured project**

A genuine mitigated alternative would be a restructured project. As discussed above under the Jobs/Housing balance issue, a restructured project would include a much smaller residential component and a much expanded employment component. If the project were designed to function as a self-sufficient "town" rather than a large bedroom community for Alameda/Contra Costa Counties, its transportation and air impacts could be drastically reduced. In addition, other changes should be made such as elimination of up to all of the golf courses to drastically curtail the demand for irrigation water.

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The EIR should carefully consider the characteristics of a restructured project that would address the most significant and unavoidable impacts of the project as proposed. The EIR should contain a full, quantitative comparison of the impacts of such a project with the impacts of the proposed project.

**H. Energy**

The EIR contains no discussion whatsoever of energy impacts. This is a CEQA requirement. The EIR should discuss energy use from the project resulting from:

- construction equipment
- vehicular use by residents and employees
- space and water heating, air conditioning

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The analysis of energy impacts is an important issue for this project because the project may be unusually consumptive of energy for a project of its size for two reasons: (1) the hot summers common in the Central Valley would contribute to a greater need for air conditioning with a corresponding increase in energy expenditure; (2) the remote location of the project from employment, and community public services will increase the length of job commute and other trips compared to a more centrally located project; (3) the hilly terrain of the site which necessitates excessive grading.

**II. DEFICIENCIES IN PROJECT-LEVEL ANALYSIS OF PHASE 1**

The Draft EIR's analysis appears to be little more than a brief expansion of the Initial Study which was prepared on Phase 1 in 1990. The analysis resembles the level of detail of the Environmental Checklist from the Initial Study.

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A. Project Description -- Project Definition is Inconsistent

The Phase 1 project is inconsistently defined. Table III.D-E and the Specific Plan map (Figure III.D.6) list 1965 units in the first phase. Table IV.F-G, which describes school child generation for Phase 1, lists the number of units at 2020, a discrepancy of 55 units. How many units are proposed to be approved in Phase 1, 1965 or 2020?

B. Geology

1. Critical Information Cannot Be Deferred to Future Studies

The Draft EIR lists as mitigation for geologic impacts that "a detailed geotechnical investigation shall be prepared as part of the project design process" (p. IV-64) and that this shall include "a slope stability analysis of the large landslide along Oak Flat Road" and "grading plans necessary to construct the Oak Flat Parkway, Primary Access Road and Oak Flat Road" (p. IV-67). These studies are to be done prior to the issuance of grading permits.

The Draft EIR states (p. IV-60) that

"grading necessary for the construction of Oak Flat Parkway and Oak Flat Road may result in steep and potentially unstable slopes... Without proper engineering procedures...these proposed slopes could result in significant erosion and slope instability impacts to an area which is already subject to landsliding hazards".

It is apparent from this statement, and others that the geotechnical problems of the site affect the fundamental feasibility of building the Phase 1 project as proposed. If the slope stability analysis shows that it is infeasible to build Oak Flat Road in accordance with the conceptual plan, the road may have to be re-aligned in a way that will affect the overall layout of uses within Village 1. The detailed geotechnical study may show that some of the areas now proposed for housing are infeasible to build. Therefore, it is inappropriate to approve the number of units that are proposed in Phase 1 without the detailed geotechnical information.

CEQA does not permit studies or consultations that may result in project modification or additional mitigations to be deferred to after EIR certification. In particular,

"The requirement that the applicant adopt mitigation measures recommended in a future study is in direct conflict with the guidelines implementing CEQA. [¶] "Environmental problems should be considered at a point in the planning process 'where genuine flexibility remains'....A study conducted after approval of a project will inevitably have a diminished influence on decision-making. Even if the study is subject to administrative approval, it is analogous to the sort of post hoc rationalization of agency actions that has been repeatedly condemned in decisions construing CEQA." (Sundstrom v. County of Mendocino (1988) 202 Cal.App.3d 296.)

Since the Draft EIR is supposed to be a project-level EIR for Phase 1, these geotechnical studies cannot be deferred, but must be prepared as part of the EIR process itself.

2. Grading on Slopes in Excess of 25% Should be Made a Mandatory Mitigation Requirement

The Draft EIR lists as mitigation that "grading generally shall not be permitted on slopes greater than 25%. Any exception to this shall be at the discretion of the Public Works Department, and shall be required to include geotechnical analyses and erosion control plans" (p. IV-65).

The EIR does not contain a slope map, nor show how much of the development, as currently proposed, would be in areas in excess of 25% slope. The EIR should contain a map and a computation showing how much of the proposed development, including Phase 1, is in areas greater than 25% slope. Development should be eliminated from these areas as a mandatory mitigation for geologic and public safety impacts.

C. A Mitigation Monitoring Program Should Be Described for the Phase 1 Project

A mitigation monitoring program is a legal requirement of the Final EIR. However, for a project of this magnitude, unless a mitigation monitoring program is described in the Draft EIR the public is deprived of the opportunity to review and comment on this critical element of project implementation. The Draft EIR should be revised to include the detailed provisions of the full mitigation monitoring program proposed for Phase 1. As a project-level description of mitigation, the agencies responsible for enforcement or oversight must be able to judge whether the mitigation, its financing, scheduling and enforcement are appropriate, adequate, feasible and whether monitoring and enforcement have been assigned to the proper jurisdiction.

The elements of mitigation monitoring described in the EIR must include:

- preconstruction field surveys for plants and animals of concern and for cultural resources
- erosion control measures and grading controls
- all proposed revegetation and habitat restoration activities
- setbacks for all wildlife corridors and habitat buffers

D. Biology

1. The DEIR Does Not Indicate How Many Acres of Habitat Types Will be Affected by the Phase 1 Area Development

The DEIR indicates that there are eight habitat types at the project site, four of which are "habitats of special concern". However, the DEIR does not contain a map of the vegetation or any indication of how many acres of each of these habitat types would be disturbed under the Phase 1 Area plan. This makes it very difficult for the reader to grasp the type and degree of impact the project would have on biological resources. The EIR must include a map of Phase 1 Area vegetation and an analysis of how many acres of each habitat type would be affected by the development plan.

For example, the Phase 1 Area encompasses 2,000 acres, of which 624 acres are termed as Conservation Area, and 1376 acres appear slated for development (these numbers are taken from Figure III.D-6, Phase 1 Preliminary Development Plan). Would this 1376 acres of development result in the loss of hundreds of acres of habitats of special concern, such as blue oak woodland, or in only a few acres of habitats of special concern? The EIR must be more specific in its explanation in order to convey the importance of the impact, which the EIR defines as significant.

Incredibly, the only sentence written under Phase 1 Area impacts to oak woodlands is, "The development would result in the loss of blue oak woodland." And although the setting indicates that at least five habitats of special concern occur in the Phase 1 area (pp IV-102, IV-105), no other habitats of special concern are discussed under the impacts section. The EIR must explain the potential impacts that development of the Phase 1 area would have on these habitats, such as how many acres of each habitat would be removed, whether minor alterations in the site plan can be made to avoid removal of these sensitive habitats, and an idea of the regional importance of these habitats - are they widespread throughout the area, or is this the only place they occur for miles around?

2. The Role of the US Fish and Wildlife and California Department of Fish and Game is Not Explained

The DEIR does not explain the role of the US Fish and Wildlife Service and the California Department of Fish and Game relation to the project, but relies on these agencies to mitigate the impacts of the Oak Flat Parkway and the primary access road on San Joaquin kit fox (Mitigation 44, pg. IV-132). The EIR must describe how these agencies would be able to enforce mitigation of project impacts.

3. Impacts to Rare Plant Species Were Not Assessed

The DEIR identifies seven rare plant species which may occur on the Phase 1 Area site, however there is no indication that specific field surveys were conducted to determine the presence of any of these species at the project site. The DEIR indicates that a two day survey was conducted in the Phase 1 Area on February 13 and 14, 1990 (page IV-97). The Phase 1 Area is 2,000 acres in size, and a two-day February survey would not be adequate to determine if these rare plant species occur at the site, particularly since nearly all of these species bloom later in the year, and certain identification would not be possible in February. Considering that the initial site survey was done in 1990 and the DEIR was not published until August 1992, it appears that surveys for plant species of concern could have been conducted in the interim.

The DEIR does not assess the specific impacts of the Phase 1 area development on rare plant species of concern, and in this regard fails to inform the decision-makers of the possible adverse impacts of the project. It is astonishing that the only assessment of impacts to rare plants for the Phase 1 area is,

"Project plans could potentially result in impacts to several plant species of special concern." (pg IV-125).

According to the DEIR (pp IV-109 to IV-113), the potential habitats for these plants include serpentine soils, thin rocky soils, dry ravines, grassland or alkaline soils associated with site drainages, stream valleys with heavier soils, valley and foothill grasslands, a digger pine and

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grassland association, and rocky places in chaparral and foothill woodland communities.

3. Mitigation for Rare Plants is Incomplete and Violates CEQA

The DEIR's recommended mitigation number 42 of conducting surveys for plant species of special concern prior to issuing construction permits does not guarantee that potential impacts to rare plants can or would be avoided. As indicated in *Sundstrom v. County of Mendocino*, supra, 202 Cal.App.3d 296, the deferral of environmental assessment until after project approval violates CEQA's policy that impacts must be identified before project momentum reduces or eliminates the agency's flexibility to subsequently change its course of action.

The DEIR must identify the specific impacts to rare plant species of concern and determine whether these impacts can be avoided before Phase 1 can be approved. The analysis in the DEIR must be supported with a survey for the rare plant species of concern that is conducted in appropriate habitat types, during the bloom period for each plant, and by a biologist that is familiar with the plants.

4. Phase 1 Area Impacts to Loggerhead Shrike and Horned Lark are Not Assessed

The DEIR indicates that Loggerhead shrike and Horned lark occur on the site (pp IV-106, IV-108). These birds are currently listed by the US Fish and Wildlife Service as Candidate 2 species, and are under consideration for listing as Threatened or Endangered. The DEIR must address the potential impacts of development of the Phase 1 Area on these species of concern.

5. The DEIR Does Not Adequately Address the Potential Impacts That Development of the Phase 1 Area Would Have on the Endangered San Joaquin Kit Fox

a. The 1990 survey is not adequately documented in the DEIR

The DEIR states that a survey for the kit fox in the Phase 1 Area, Entry Area, and Oak Flat Road was conducted in July and August of 1990, and that this and a 1992 survey of the primary access road is included in Appendix D (pg IV-115). Only the 1992 survey is included in Appendix D. The 1990 survey is not included in the appendix, and is only briefly described in the body of the document.

Because the particulars of the survey method for the 1990 survey are not described in the EIR, it is not known whether the methodology was adequate. Specifically, it is not demonstrated that the survey was conducted over the minimum required number of days for the season, with the correct number of scent stations, or whether transects were walked at 100 meter intervals, as required by the DFG Region 4 Guidelines, or how many nights of spotlighting occurred and whether spotlighting was conducted within 2 miles of the site as required under the guidelines. The DEIR must include a description of the survey methodology and survey results for the reader to ascertain whether the DEIR adequately assesses the potential project impacts on the kit fox.

b. The 1990 survey is out of date

Two years passed between the initial survey for San Joaquin kit fox in portions of the site and the publication of the Draft EIR. In that period of time it is feasible that kit fox have moved into suitable habitat in areas surveyed in 1990. In addition, the methods used for the 1990 survey would not

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be considered adequate in 1992 because camera stations were not used. The DEIR must either justify why an updated survey was not completed for the Phase 1 Area, Entry Area, and Oak Flat Road, or include the results of an updated survey.

- c. The fact that a survey was done for the Phase 1 area implies that the Phase 1 area contains the habitat for San Joaquin kit fox

The DEIR does not show how much potential kit fox habitat occurs in the Phase 1 area, how development of the Phase 1 Area may affect kit fox in the context of the Specific Plan, and how development of the Phase 1 area may affect kit fox regionally. This information is essential if the potential impacts of development of the Phase 1 Area on San Joaquin Kit Fox are to be adequately addressed in the EIR.

- d. The mitigation measures in the DEIR are too limited and do not provide assurance that take of the species will be avoided or minimized

The mitigation measures for San Joaquin kit fox for the Phase 1 Area are to provide road undercrossings every quarter-mile and fencing of a particular size in areas of kit fox habitat, and to undertake consultation with the US Fish and Wildlife Service and the California Department of Fish and Game regarding impacts of Oak Flat Parkway and Primary Access Road. The DEIR must explain what specific measures are available to reduce or avoid take of this species during construction and operation of this project. The EIR must assess whether these measures are feasible for the project, and whether mitigation that may be required by the US Fish and Wildlife Service and the California Department of Fish and Game might result in changes to the project.

- e. A wetland delineation needs to be done

As described above for the overall project, a wetland delineation must be done for the Phase 1 area. The delineation is to determine whether there is Corps jurisdiction over the project and whether an individual permit or a Nationwide permit applies to stream modifications.

#### D. Public Services

##### 1. Water

The EIR discusses a water "plan" for Phase 1 that appears to be little more than a scheme. The proposal to pump water 7 or 8 miles uphill from valley floor simply accentuates the fact that the nearly 30,000-acre project site contains almost no groundwater. The EIR states that the project applicant has acquired the "well sites", but not that the applicant has acquired rights-of-way or easements to build their so-called "intake pipelines". If these rights-of-way cannot be acquired, then the use of the well-site water is infeasible.

The EIR has not evaluated many of the impacts associated with water pumping and long-distance transmission. The EIR must address the land use and biological impacts of constructing the pipelines as well as the visual, noise and energy use impacts of the pumping stations and pipelines. The EIR must evaluate the biological, seismic safety and public safety impacts of water storage reservoirs. As described above, the EIR must evaluate the impacts to prime agricultural lands and agriculture of withdrawing the water from the "well sites".



2. Wastewater Disposal

A sludge disposal plan with executed agreements from landfill operators or other recipients must be completed before Phase 1 can be approved.

3. Schools

a. School impact mitigation is inadequate

The project has provided essentially no mitigation for the Phase 1 school impacts. According to the EIR analysis (which understates the project impact for the reasons discussed above), the Phase 1 project would generate 556 students in grades K-6, 111 in 7-8 and 185 in grades 9-12. If all 2,020 units in Phase 1 were to generate school children, the number of K-6 would be 913, 182 in 7-8 and 304 in 9-12.

The analysis given in Table IV.F-E (p. IV-195) states that the Von Renner Elementary School is over capacity already by 47 students, the Bonita Elementary School has a remaining capacity of 24 students, Yolo Junior High School is over capacity, and Orestimba High School has a remaining capacity for 109 students. Therefore, none of the existing schools listed as being available to the project would be able to serve the project.

It is not sufficient for the EIR to state that the developers would pay an impact fee of \$1.58 per square foot and that this "may not cover the full cost of school construction", and that "additional financing should be coordinated with the school district."

School facilities in Stanislaus County and statewide are now being strained to the limit. To contemplate approving a project the magnitude of Phase 1 requires a full demonstration that the developer is committed to whatever is necessary to provide the school districts with full mitigation. The EIR must analyze the amount of facilities that could be built with the \$1.58 impact fee, and how much additional funds or facilities would be needed for full mitigation. It is likely that the Newman-Crows Landing Unified School District will require that at least one new elementary school be built by the developer on the project site since 913 students is more than enough to fill one elementary school (600 - 800 students). A fully executed mitigation agreement with the school district should be made a mandatory condition of the project.

The EIR should also resolve the issue of bussing students to high schools and junior high schools as far away as Newman. This may be unacceptably far away from the point of view of public safety for the younger children (grades 7 - 8), length of time spent in transit, or other reasons.

b. School analysis needs to consider cumulative impact

The impact on local schools will come not only from the Diablo Grande project, but from other "new towns", smaller subdivisions, and infill development on the west side of the valley. The EIR should fully examine the cumulative impacts on the school district from projects including Mayes Ranch, Lakeborough, and Kaufman and Broad (see Table 1) and other developments which impact the Newman-Crows Landing USD. The EIR must discuss what plans the district has, such as new junior high and high school sites to deal with the regional problem of school facilities. The EIR must describe how the Diablo Grande project should participate in the timing and funding of the new facilities.



4. Fire

Fire mitigation for Phase 1 is inadequate. As described above for the full project, a fuel reduction plan must be fully developed and subject to public review before Phase 1 development can be approved.

E. Hazardous Materials

Figure III.A-3 of the Draft EIR (p. III-4) shows that there are existing structures in the Phase 1 area, including the Oak Flats Ranch, a residence and a stable. According to the cultural resources section there are five historic homesites and ranches within the Phase 1 area dating back to the 1870's (p. IV-156 - IV - 157).

The historic use of these areas for ranching shows that there is a good potential that hazardous materials may have been deposited there at some time. Such materials include waste fuels from vehicles, paints and solvents, pesticides and herbicides. Such old ranch and agricultural sites often contain buried oil drums or barrels which have leaked and caused localized soil contamination.

The EIR did not include any discussion of the hazardous waste issue. As a project-level EIR for Phase 1, the EIR must include an investigation of the potential for buried or other hazardous wastes on the site. If hazardous wastes are found, then the EIR must contain a cleanup and remediation plan for the wastes as part of project mitigation.

Thank you for the opportunity to provide these comments.

Sincerely yours,

*Karen G. Weissman*  
Karen G. Weissman, Ph.D. *AK*  
Vice-President

Tay Peterson  
Senior Associate

TABLE 1  
PROJECTS CONTRIBUTING TO CUMULATIVE IMPACT

PROJECT NUMBER	PROJECT NAME	TYPE	ACRES	OTHER INFORMATION
<u>Merced County</u>				
1	Villages of Laguna San Luis	Mixed use	4,535	16,000 units 2 million s.f. commercial 4.5 million s.f. office/light industrial
2	Wilkinson Ranch	Residential	177	630 single family plus additional multiple family
3	Fox Hills	Residential	390	400 units Golf course
4	Santa Nella		4,800	
<u>Stanislaus County</u>				
1	Mayes Ranch	Residential & commercial	1400	
2	Lakeborough	"New Town" (incl resid., commerc., indust., open space, etc.)	4300	10,000 du, 5.8 million sf office/ commercial industrial
3	Diablo Grande	"New Town" (incl resid., recreat., office/indus, open space)	30,000	
4	Grayson Park #3	Residential & commercial	155	633 resid. lots
5	North Salida	Residential & commercial	1600	
6	Mapes Ranch	"New Town" (incl resid., commerc., indust., open space, etc.)	9600	
7	Boatwright Property	Residential, golf course, commercial		
8	Del Rio Community Plan Update	Residential, golf course, commercial	1242	
9	Kaufman & Broad		1100	

TABLE 1  
PROJECTS CONTRIBUTING TO CUMULATIVE IMPACT

10	Salida		750	
11	Village One Specific Plan	Mixed use (residential, commercial, industrial)	994	7,500 units
12	Stanislaus Motorsport Resort	Speedway, clubhouse	960	
13	Williams Ranch	27-hole golf course	2,400	not specified
14	Riverbank Village	Residential	633	
15	Newman General Plan	Mixed land uses		3,200
<u>San Joaquin County</u>				
1	Liberty	New Town	483	
2	Forest Oaks		1385	
3	Riverbrook	Golf course (+resid.?)	757	
4	New Jerusalem	New Town	3260	
5	Tracy Hills	New Town	6000	10,000 units 485 acres commercial/industrial
6	Mountain House	New Town	4,667	16,000 units residential 275 acres industria 427 acres commercial golf course
7	Spanos Park		1300	
8	Escalon Golf Course Subdivision		750	
9	Collier Ranch	Mixed use	725	1,700 - 2,200, 27-hole golf course
10	Rancho San Joaquin			1000 lots
11	Lathrop General Plan	Mixed Use	13,000	8,170 units
12	Gold Rush City	Theme park	2,500	4,000 hotel rooms, 5.4 million square feet

1 **RESPONSES TO THOMAS REID ASSOCIATES OCTOBER 16, 1992 COMMENT LETTER**  
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4 1. The commenter's opinions are noted. Specific concerns are addressed  
5 in responses to specific comments, below. Refer to response to  
6 comment 1 of the Merced County Planning Department October 15,  
7 1992 comment letter for a revised Introduction chapter of the EIR.

8 2. The Introduction section of the EIR has been revised to more clearly  
9 spell out the relationship between project and program aspects of the  
10 EIR (see response to comment 1 of the Merced Planning Department  
11 October 15, 1992 comment letter). Phase 1 is addressed at a project  
12 level in this EIR. The applicant has agreed to subject all future phases  
13 of development to full CEQA review.

14 3. The market study referred to in the EIR is available for review at the  
15 County Planning and Community Development Department. The  
16 County has reviewed this study and considers it to be reasonable.

17 4. Page IV-24 states that Phase 1 would accommodate up to 1,310 jobs  
18 and generate up to 933 resident wage-earners. In Phase 1,  
19 employment would exceed the 1:1 ratio that would be achieved in a  
20 "truly" balanced community. Page IV-31 states that development of all  
21 project phases would result in an additional 1,505 wage earners for  
22 a total of 2,438. Assuming that 370 wage earners would have home  
23 occupation jobs, this would reduce the total to 2,068 wage earners.  
24 In relation to the 1,310 on-site jobs, the project would result in a ratio  
25 of approximately one job per 1.6 resident wage earners. County  
26 policies do not set any standards for land use mixed for new towns.  
27 Although the 1.6:1 ratio falls short of the ideal 1:1 ratio found in a  
28 "truly" balanced community, the project could be considered to  
29 represent an acceptable mix of land uses.

30 The table included in the comment shows an analysis of the family  
31 income level necessary to purchase homes in the project home price  
32 ranges. This table has been reviewed by LSA's economist and is hereby  
33 incorporated into the EIR. As indicated in the comment, the project  
34 would not be providing housing affordable to most of the on-site  
35 workers. This issue is addressed in response to comment 14 of the  
36 Plumbers and Steamfitters U.A. Local, October 19, 1992 comment  
37 letter.

38 5. A fiscal analysis is not required in an EIR. The EIR suggests mitigation  
39 measures for the issues identified in the comment. Some of these  
40 impacts are not mitigable below a level of significance. It is beyond  
41 the scope of the EIR to determine if the applicant can afford their  
42 share of these mitigations. The County has not required an analysis of  
43 potential costs to the County.  
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6. As of May 1993, the project applicant has filed a Notice of Non-Renewal of Williamson Contract for the Phase 1 Preliminary Development Area of the project site. Development of later phases of the project may require either cancellations or Notices of Non-Renewal, depending on scheduling of the project.

Generally, after the Notice of Non-renewal is received, the County typically makes the necessary findings and cancels the contract before acting on a proposed General Plan amendment. After the GPA is adopted, then the County will rezone the site accordingly.

At the appropriate time, the County will consider the issues concerning cancellation or non-renewal, including those described as possible findings in the Thomas Reid letter. However, it is outside of the scope of this EIR to prepare or recommend findings for Williamson Act cancellations or non-renewals of the project site.

7. Page IV-26 of the EIR addresses the impacts of Phase 1 development on rangeland and ranching and impacts on prime farmland. Page IV-31 addresses the impacts of overall site development on these issues.

8. Refer to page IV-101, line 33 of the EIR, and mitigation 3, page IV-126 for reference to federal and State agencies' involvement with stream and wetland issues. Three small stockponds in the Phase 1 area may be filled and portions of the large (5.5-acre) alkaline area along the primary access road near Del Puerto Canyon Road may be lost. Road crossings of Salado Creek will result in the removal of little riparian vegetation, with four to six blue oak, valley oak, and Fremont cottonwood potentially removed.

Delineation of streams and wetlands in the Phase 2-5 areas (overall site) will occur prior to consideration of specific development plans.

9. Comment noted.

10. See U.S. Fish and Wildlife Service letter, response to comment 6 (with maps).

11. See response to comment 8 of the U.S. Fish and Wildlife Service October 16, 1992 comment letter.

12. See U.S. Fish and Wildlife Service letter, response to comment 1.

13. As discussed in responses to comments 6a and 11 of the U.S. Fish and Wildlife Service October 16, 1992 comment letter, the question of whether the Diablo Grande ranch is considered kit fox habitat has not been resolved. There are no historic records from the ranch and no kit fox were detected in the survey of the Phase I development area. Additional surveys of the Phase I area will be conducted and

determinations regarding kit fox use of this area will be made during this consultation.

14. As noted in response to comment 6c of the U.S. Fish and Wildlife Service October 16, 1992 comment letter, the Service has prepared a list of standardized recommendations for the protection of kit fox during the construction period. These include:

- Buffers 100 feet wide around new and re-identified dens would be marked using stakes and flagging to alert construction personnel to avoid these areas. These measures would be developed through consultation with the Service and the Department of Fish and Game.
- Construction activities would be avoided in a 100-foot-wide buffer zone around potential dens. Construction activities would not occur within one mile of kit fox dens between early December and late May to ensure that active kit fox are not disturbed when pups may be in or near the dens. If destruction of a potential den would be considered unavoidable, with the Service's permission it may be excavated by hand under a biologist's supervision prior to construction to ensure that no kit fox are present.
- Vehicle traffic would be restricted to designated access roads and the immediate vicinity of construction sites. Vehicle speeds would not be allowed to exceed 20 mph in most areas. This is especially important at night when kit fox are most active. To the extent possible, night-time construction would be minimized.
- Speeds would be limited to 20 mph through speed limit signs and by educating construction workers.
- No pets or firearms would be permitted on construction sites so as to avoid harassment or killings of kit fox. Construction workers would leave the construction area and adjacent potential kit fox habitat each night to minimize disturbance to actively foraging animals.
- Construction excavations deeper than three feet would be either fenced, covered, or filled at the end of each working day, or have escape ramps provided to prevent entrapment of kit fox.
- All construction pipes, culverts, or similar structures with a diameter of four inches or greater that are stored at a construction site more than eight hours would be inspected for

kit fox before the pipe is subsequently buried, capped, or moved in any way.

- All food-related trash would be deposited in closed containers and regularly removed from work sites.
- Rodenticide or herbicide use would be restricted in project areas with known kit fox occurrences.
- Any mortalities or injuries to kit fox that occurred as a result of project-related actions would be reported immediately to the Service and Department of Fish and Game.
- These provisions would be included in construction contracts, along with a requirement that construction crew members read and agree to adhere to the contracts.

It is not possible to determine at this time whether mitigation which may be required by the Service or Department of Fish and Game would result in changes to the project. See also response to comment 13 of the U.S. Fish and Wildlife Service October 16, 1992 comment letter.

15. See U.S. Fish and Wildlife Service letter, response to comment 4.
16. Refer to response to comment 12a of the San Joaquin County Community Development Department October 1, 1992 comment letter.
17. See U.S. Fish and Wildlife Service letter, response to comment 2. Stream areas potentially filled in the Phase 1 area and access road construction will likely be greater than one acre and less than 10 acres.  
  
Stream and wetland areas in Phase 2-5 (overall site) will be calculated prior to consideration of specific development plans.
18. See response to comment 14 of the San Joaquin County Community Development Department October 1, 1992 comment letter.
19. Values for water use for the hotel/conference center were determined on the same basis as the other commercial areas; i.e., each employee was assumed to use 80 gallons per day (gpd). The number of people to be employed at the hotel/conference center is estimated to be 221, for an estimated annual water use of 19.8 acre-feet per year (af/yr). While this is less than the commenter's calculation of 33.6 af/yr, the difference amounts to less than 0.4 percent of total Phase 1 average daily water demand, a negligible amount.

*Restaurant water use* - similar to the hotel figures, an allowance of nine acre-feet per year was included in the EIR for the restaurants. While there are no estimates available for restaurant seating, using the

commenter's estimate of 10 gpd per customer, 9 af/yr would allow for 800 restaurant patrons per day. Using 80 gpd per employee is reasonable for planning purposes.

*Residential unit water use factor* - The figure used in the EIR of 274 gpcd is correct. Using 2.4 persons per dwelling unit (weighted average for Phase 1), 275 gpd per household is equivalent to approximately 115 gpcd. This is low for a project of this type.

Very little data are available for residential use on the west side of Stanislaus County. The communities of Patterson and Newman are very different from Diablo Grande in terms of lifestyle, lot size, and resident income. The unit water use factor for residential water use chosen for the EIR was influenced by lot size and the arid climate.

DWR Bulletins 113-3 and 113-4 report that the average annual applied water requirement for improved pasture on the west side of the San Joaquin Valley is 6 af/ac/yr. Assuming that every acre of a golf course or other open space receives 6 af/ac/yr is conservative, but this was a conscious decision. A total of 6 af/ac may not be needed every year but would be required in years of low rainfall. Facilities must be sized to provide for dry years. Conservatism in estimating water requirements and sizing facilities is appropriate at this stage of planning.

Commensurate with mitigation measure 10 on page IV-127 of the EIR, and the commenter's comment, the following mitigation measure should be added to the list of mitigations on page IV-178 and 179:

- "10. In selecting drought-tolerant plant species for landscaping, native plant species shall be planted where possible, including on the golf courses."

As stated on page IV-172 of the EIR, "Reclaimed water also may be released to the creeks adjacent to the treatment plant if there is no concurrent irrigation demand." Mitigation 2 on page IV-181 should be amended to reflect the following change (in bold):

**"In the event that there is no concurrent irrigation demand, prior to discharge of excess....."**

20. Potable water storage reservoirs would be in a steel tank and clear well built to meet all applicable codes (see page IV-173). The tank and clear well would be located above the eastern golf course. Rupture of the tank and/or clear well could flood portions of Salado Creek and the entry area. The water tank and wells would be faced to prevent public access. Mosquito breeding is typically not a problem in these structures.



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21. The volume of water required for site grading dust control is difficult to estimate. The time of year, weather conditions, and duration of construction are very influential. For the 2,000-acre site, water use could range from as low as 100 to more than 1,000 acre-feet.

Water for dust control is commonly obtained by the construction contractor. Several source options exist; the contractor would examine each alternative and choose the least expensive. There are a variety of potential sources, including water purchased from a local farmer, from an irrigation district or landowner and taken from the California Aqueduct or Delta-Mendota Canal, or from a well on land owned by Diablo Grande. Conveyance options include water trucks, a temporary pipeline along Oak Flat Road constructed by the contractor, or the permanent water transmission pipeline along Oak Flat Road. Water would most likely be stored in either a temporary pond(s) or permanent golf course pond(s).

22. The quantity of water treatment sludges (16,000 tons per year) reported previously in the EIR assumed a high moisture content. The local landfill operator requires that moisture content be reduced to 50 percent prior to landfilling. This moisture content is achievable through air drying and/or mechanical dewatering. At 50 percent moisture, the sludge quantity would be approximately 500 tons per year from Phase 1, and 2,000 per year at buildout. These numbers are approximate and can be expected to vary, as many assumptions were required concerning influent water quality and treatment process type and efficiency.

The Diablo Grande Partnership is exploring an alternate new technology, Algal Turf Scrubbers™, represented by its inventor, Mr. Walter Adey of the Smithsonian Institution, as viable for treating groundwater and surface from the California Aqueduct without any sludge. Pilot tests will be completed before commitment is made to any existing package plant technology.

23. Percentages of seasonal and retirement housing are based on a market study prepared by ERA in July 1991. As stated in the footnotes to Table IV.F-F and IV.F-G on pages IV-197 and IV-199 of the EIR, these types of housing would not generate school-age children and are, therefore, subtracted from the total number of units proposed for each dwelling type. The December 1991 market study prepared by ERA is in the Diablo Grande Specific Plan (Technical Appendix), and may be reviewed at the Stanislaus County Planning and Community Development Department. It should be noted that the December 1991 study uses higher percentages for the retirement and seasonal housing. The July 1991 study was used in the EIR because its retirement/seasonal percentages were more conservative.

- 1                   24.    The EIR, pages IV-196 through IV-198, notes that existing schools do  
2                   not have sufficient facilities to accommodate students generated by  
3                   Phase 1 of the proposed project. Facilities would have to be  
4                   constructed and/or mitigation funding contributed by the applicant as  
5                   part of developer fees.  
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7                   School impacts of the project would be potentially significant if not  
8                   mitigated by funding and/or facilities provided by the applicant. See  
9                   response to comment 1 of the Newman-Crows Landing Unified School  
10                  District October 13, 1992 comment letter.  
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12                 An updated Fiscal Impact Analysis, which includes potential impacts to  
13                 the Newman-Crows Landing Unified School District, was prepared by  
14                 the applicant in December, 1992 and is on file with the County. Based  
15                 on the assumptions presented in this analysis, school impact fees  
16                 would provide adequate funding for new facilities necessitated by the  
17                 proposed project.  
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- 19                 25.    A Wildfire Fuel Reduction Plan will either be included in a  
20                   comprehensive Resource Management Plan, or submitted separately to  
21                   the County prior to the issuance of any residential building permits.  
22                   The plan will include a transitional buffer zone between development  
23                   and open space areas.  
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- 25                 26.    The EIR notes that Phases 2-4 will require up to four fire stations.  
26                   Mitigation 2 on page IV-188 is intended to assure funding for these  
27                   facilities. The second sentence of that mitigation is revised to read as  
28                   follows: "The project proponent should either provide all required fire  
29                   protection improvements (including fire stations) as determined by the  
30                   WSFPP, or pay the applicable Capital Facilities Fees to cover facilities  
31                   and equipment which are not provided on site by the project  
32                   proponent." Note that phases 2-4 will require additional  
33                   environmental review to which the applicant has agreed. The applicant  
34                   and the West Stanislaus Fire Protection District will negotiate the  
35                   construction and location of fire stations and/or fees when each phase  
36                   is being reviewed.  
37

- 38                 27.    The trip generation assumptions for the DEIR were based upon market  
39                   segment studies conducted by the economic consultant for the EIR. To  
40                   ensure that the traffic impacts are constrained to the levels used in the  
41                   DEIR, traffic thresholds were defined for Phase 1 and full build-out of  
42                   the project. As the project is developed, these thresholds will be  
43                   evaluated. If traffic levels approach the threshold, future development  
44                   will be subject to additional CEQA review. Refer to response to  
45                   comment 4 of the California Department of Transportation October 16,  
46                   1992 comment letter  
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- 48                 28.    The EIR traffic consultant does not agree with the assumption that  
49                   numerous commuters will use Del Puerto Canyon Road. However, that

portion of Del Puerto Canyon Road between I-5 and the new access road into the project will be significantly impacted. The mitigation program for the project indicates roadway design requirements in this area.

Refer to response to comment 1 of the Santa Clara County Department of Planning and Development September 10, 1992 comment letter. for a discussion of Del Puerto Canyon Road project impacts. Refer to responses to comments 6 of the California Department of Transportation October 16, 1992 comment letter for a disussion of the regional I-5 traffic impacts.

29. See responses to comments 4 and 6 of the California Department of Transportation October 16, 1992 comment letter for disussions of the cumulative traffic impacts. The roadway capacity values used in the DEIR have been reviewed based upon comments by various agencies and a more conservative set of capacity assumptions have been developed.

30. Refer to response to comment 29 of this letter.

31. Since the DEIR was circulated, the EIR consultant, Caltrans, County staff and project sponsor have met to discuss the cumulative traffic evaluation along I-5. In addition, the project sponsor has provided a recommendation for contributing fees for project impacts along I-5. Refer to responses to comments 1, 4, 5 and 6 in the California Department of Transportation October 16, 1992 comment letter.

32. The commenter implies that the EIR declared project air pollutant emissions as "insignificant" or "significant but mitigable." On the contrary, the EIR states on page IV-298, lines 28-30:

"Considering the magnitude of Diablo Grande's air pollutant emissions, even the implementation of a comprehensive set of TDM strategies would not reduce project emissions to insignificance."

In their use of the term "significance threshold," the commenter seems to be referring the SJVUAPCD's Best Available Control Technology (BACT) and Offset thresholds. At present, these thresholds are applicable only to emissions from stationary sources. A New and Modified Indirect Source Review Rule is under development, but until such a Rule is adopted, the SJVUAPCD will have no legal power to regulate mobile source emissions. However, in the absence of specific guidelines from the SJVUAPCD, LSA used current BACT and Offset criteria as a measure of project significance, with a result already mentioned above. The Air Quality Attainment Plan (AQAP), adopted in January 1992, lowered the BACT and Offset thresholds for ozone

precursors to zero; by this measure, any new emissions of these pollutants are significant.

On page IV-289, lines 19-20, the EIR noted the 5 percent annual reduction of air pollutant emissions required by the California Clean Air Act (CCAA). It would be closer to the original language of the CCAA to call for all feasible mitigation measures, as the EIR does on page IV-289, line 21, rather than all conceivable mitigation measures, as the commenter suggests.

At this stage of project planning, the EIR can only urge the adoption of a general program of measures which would reduce the project's generation of motor vehicle trips.

It is acknowledged that the implementation of even the most comprehensive program of Transportation Control Measures (TCMs) would only result in at most a 10 to 15 percent reduction in project air pollutant emissions.

The AQAP estimates that, even with the projected 29 percent population growth (i.e., from 2.77 million to 3.58 million) and 35 percent employment growth (i.e., from 1.04 million to 1.41 million) foreseen in the San Joaquin Valley over the next eight years, emissions of ozone precursors could be reduced by about 30 percent, if all the control measures proposed by the AQAP were fully implemented. The project's increment to the Valley's population and employment base will not, by itself, invalidate the estimates which underlie the AQAP. The only question remaining is whether future air pollutant emissions in the Valley would be less if the growth associated with development on the project site happened elsewhere in the Valley. Unfortunately, this question can not be answered from existing data.

The Air Quality section of the EIR was written before the AQAP was finalized in January 1992. Consequently, it does not include a summary of the aspects of the AQAP that relate to the project. To remedy this deficiency, a new section, entitled *Air Quality Planning and Control in the San Joaquin Valley*, has been added to the EIR Air Quality setting. That section is included in a revised Air Quality section, which is Appendix D to this FEIR.

33. The trip generation data upon which the air pollutant emissions estimates were based were developed by Dowling Associates. The average external trip lengths were determined by assuming that Stockton and Modesto were the destinations; the proportion going to either was determined by Dowling Associates. The project's URBEMIS3 output is included as Appendix D to this FEIR.
34. The discussion of cumulative impacts is quantified where possible, such as for traffic and air quality impacts. In many instances,

1 quantification of cumulative impacts would be speculative, not feasible,  
2 or relatively meaningless. In addition, quantification of cumulative  
3 impacts is not specifically required by CEQA. As stated in the EIR on  
4 page V-8, "The analysis need not be in-depth as the project along;  
5 '...but be guided by practicality and reasonableness...' (Section 15130)."  
6 While the discussion should be as specific as possible, it can be as  
7 general as necessary (Terminal Plaza Corp. v. City and County of San  
8 Francisco [1st. Dist. 1986] 177 Cal.App.3d 892, 904-905 [223 Cal.Rptr.  
9 379, 385-386]).

10  
11 A map showing the locations of the cumulative projects in the revised  
12 Table V.G-A has been added as Figure V.G-1. This map also indicates  
13 service area boundaries as appropriate. Both the revised table and  
14 figure are attached following this page.

15  
16 The cumulative number of school children is not quantified because  
17 the information available on some of the projects does not specify how  
18 many dwelling units or what type of dwelling units are proposed.  
19 Therefore, it is not possible to calculate numbers of school children  
20 based on this incomplete information. The following mitigation  
21 measure for cumulative impacts is added to mitigation 1 on page IV-  
22 198 of the DEIR to ensure that school district needs are adequately  
23 accommodated prior to occupancy of residences:  
24

Table V.G-A - Cumulative Projects

Number	Project	Location	Description	Status
1.	Lakeborough	Stanislaus County: I-5 adjacent to near the Fink Road interchange.	<ul style="list-style-type: none"> <li>• 4,328 acres</li> <li>• 10,000 dwelling units</li> <li>• 1,580,000 sq. ft. commercial</li> <li>• 4,181,800 sq. ft. office/industrial</li> </ul>	Pending
2.	Grayson Park Unit Number Three	Stanislaus County: adjacent to the northerly boundary of Grayson; north of Minnie Street on River Road	<ul style="list-style-type: none"> <li>• 154.27 acres</li> <li>• 633 single-family dwelling units</li> <li>• 40,500 sq. ft. neighborhood commercial</li> <li>• 13.93 acre park</li> </ul>	Approved
3.	Patterson Gateway	Stanislaus County: Intersection of Rogers and Sperry Roads	<ul style="list-style-type: none"> <li>• 52 acres</li> <li>• commercial</li> </ul>	Approved
4.	Santa Nella Community	Merced County: Santa Nella area near I-5 and Route 33	<ul style="list-style-type: none"> <li>• 4,800 acres</li> <li>• Mixed-use developments</li> </ul>	Pending
5.	Villages of Laguna San Luis	Merced County: intersection of I-5 and Highway 152	<ul style="list-style-type: none"> <li>• 4,535 acres</li> <li>• 15,962 dwelling units</li> <li>• 2,069,105 sq. ft. commercial</li> <li>• 4,538,925 sq. ft. office/light industrial/research and development</li> <li>• 78,500 sq. ft. medical</li> <li>• 187,300 sq. ft. community services</li> </ul>	Pending
6.	Wilkinson Ranch	Merced County: south of Ingomar Grade and Grand Avenue; west of Volta Road	<ul style="list-style-type: none"> <li>• 177 acres</li> <li>• 630 single family dwelling units</li> <li>• 6 acres multiple housing units</li> <li>• 25 acres parks</li> <li>• 5 acres commercial</li> </ul>	Pending
7.	Los Banos Grande	Merced County: 3 miles west of I-5 and southwest of Los Banos	<ul style="list-style-type: none"> <li>• New reservoir</li> </ul>	Pending

Number	Project	Location	Description	Status
8.	Fox Hills New Community	Merced County: near I-5 and southern terminus of Volta Road	<ul style="list-style-type: none"> <li>• 390 acres</li> <li>• 400 dwelling units</li> <li>• 18-hole golf course and associated development</li> <li>• neighborhood commercial</li> <li>• neighborhood park</li> </ul>	Pending
9.	Gustine General Plan Update	Merced County: Highway 33 and Highway 140	<ul style="list-style-type: none"> <li>• 3,150 dwelling units</li> <li>• 136 acres commercial</li> <li>• 140 acres industrial</li> <li>• 800 acres agricultural commercial</li> <li>• 100 acres park and open space</li> </ul>	Pending
10.	New Jerusalem	San Joaquin County: I-5 and SR-132	<ul style="list-style-type: none"> <li>• 3,225 acres</li> <li>• 7,562 dwelling units</li> <li>• 551 acres commercial/industrial</li> </ul>	Approved
11.	Mountain House	San Joaquin County: north of State Route 50 and northwest of Tracy	<ul style="list-style-type: none"> <li>• 4,667 acres</li> <li>• 16,000 dwelling units</li> <li>• 702 acres commercial/industrial</li> </ul>	Pending
12.	Tracy Urban Management Plan	San Joaquin County: SR-50 and I-205	<ul style="list-style-type: none"> <li>• 5 "urban villages"</li> <li>• 8,000 acres commercial/industrial</li> </ul>	Pending
13.	Tracy Hills (included in Tracy Urban Management Plan)	San Joaquin County: I-580 at Corral Hollow Road	<ul style="list-style-type: none"> <li>• 6,000 acres</li> <li>• 10,300 dwelling units</li> <li>• 500 acres commercial/industrial</li> </ul>	Pending
14.	Gold Rush City	San Joaquin County: I-5 and Highway 120	<ul style="list-style-type: none"> <li>• 2 theme parks</li> <li>• 5,000 acres</li> <li>• 4,000 rooms of lodging</li> </ul>	Approved
15.	Lathrop General Plan Update	San Joaquin County: SR-50	<ul style="list-style-type: none"> <li>• 13,000 acres</li> <li>• 8,700 dwelling units</li> </ul>	Approved
16.	Tri-State-Cheng GPA	San Joaquin County: I-5 and SR-50	<ul style="list-style-type: none"> <li>• 326 acres</li> <li>• highway service and light industrial</li> </ul>	Pending



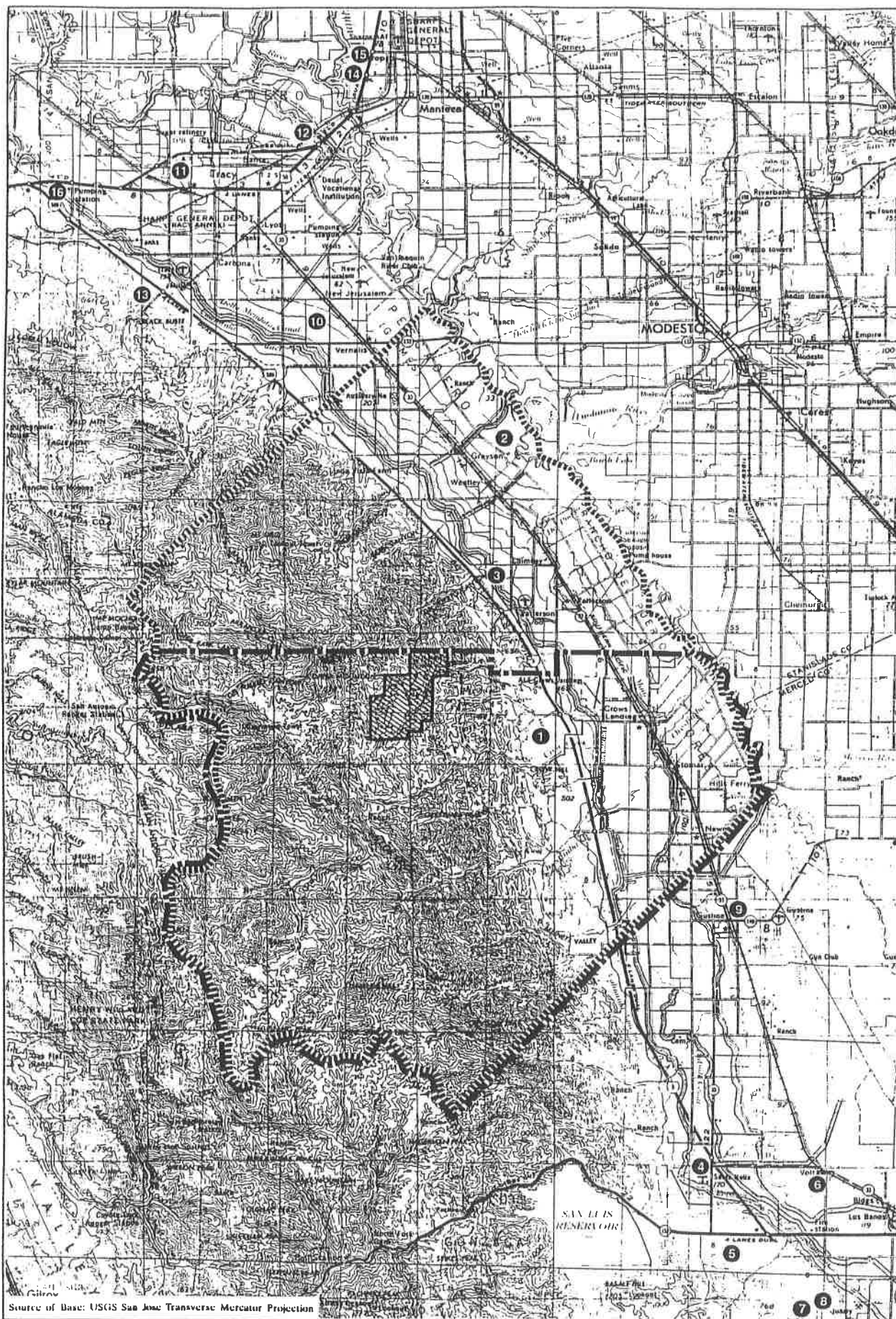


Figure V.G-1

Cumulative Project Locations



"The timing of payment of school fees and/or construction of new facilities should be phased in cooperation with concurrent cumulative projects."

As with schools, water impacts cannot be quantified because of inadequate information regarding where some of the projects will obtain their water supplies. Water for the proposed Diablo Grande project will be obtained from the Western Hills Water District. This is a newly formed water district, and none of the other cumulative projects listed by the commenter are within its service area. In addition, the sources of water for the new district have not been ascertained. The new water district will be competing for sources of water with the other water districts in the state and to attempt to determine the outcome of these negotiations is too speculative for this document.

Diablo Grande is proposing its own wastewater treatment facilities. None of the cumulative projects would impact these facilities.

Information available on cumulative impacts is not adequate to quantify cumulative solid waste generation, however such generation would be substantial.

Cumulative impacts to agricultural lands include 1,600 acres of rangeland during Phase 1 and 22,000 acres, excluding Phase 1, during development of the overall site, resulting in a total impact of 23,600 acres.

Cumulative demand for fire and police services is not quantified for the same reasons as for schools. A similar cumulative impacts mitigation measure is added:

"The timing of payment of fire and police service fees and/or construction of new facilities should be phased in cooperation with concurrent cumulative projects."

Refer to U.S. Fish and Wildlife Service comment letter, responses to comments 2 and 11; and California Department of Fish and Game comment letter, responses to comments 2, 3, 4, and 5.

The acreages of habitats impacted by development of the Phase 2-5 areas will be calculated prior to development of specific development plans.

It would be speculative to discuss impacts of all possible water sources. It is not certain where the Western Hills Water District would obtain its water. The EIR acknowledges that cumulative impacts could result in secondary effects, such as on fisheries and wildlife resources. Any major groundwater storage facility would require full CEQA review.

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35. Cumulative projects suggested by the commenter have been added to Table V.G-A. The boundaries of the Newman-Crows Landing School District are shown in Figure V.G-1. The only project within this boundary is Lakeborough. Assessment of all statewide projects seeking state funding is not within the scope of this EIR. Assessment of all projects competing for water from the State Water Project is also not within the scope of this EIR. In addition, as stated in response to comment 34, above, the source of water for the proposed project is not certain. Some of the water for the proposed project and for the cumulative projects may be obtained by purchasing water rights from farmers and ranchers.

36. The EIR considers the Mitigated Project Alternative to be a realistic alternative to the project. As noted in CEQA section 15126(d)(3), "The discussion of alternatives shall focus on alternatives capable of eliminating any significant adverse environmental effects or reducing them to a level of insignificance, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly. (Emphasis added.) Obviously, the applicant could choose not to build this alternative even if approved by the County.

This alternative would eliminate the 100 estate lots. Other units displaced from the areas with over 25 percent slope and in the cul-de-sacs could be relocated elsewhere in the Phase 1 development in Oak Flat. This alternative does not provide full mitigation of the project's impacts, but would substantially reduce impacts in the open space and hill conservation areas. It would still result in the development of approximately 10,000 acres of the site, with attendant impacts as noted in the "Impacts" discussion on pages VI-9 through VI-12 of the EIR. A map of areas of over 25 percent slope has been added to the geology section of this EIR, in response to comments 42 and 43 in this letter.

Most impacts of the project that would be reduced by this alternative do not lend themselves well to quantification. Therefore, the impacts discussion of biological resources, visual quality, geology, hydrology, cultural resources, and services contained in the EIR are considered appropriate. As noted in the Transportation/Circulation discussion on page VI-12, this alternative would reduce traffic by about two percent compared with the project; this would result in a similar negligible reduction in emissions of airborne contaminants. It should be noted that the mitigated project alternative also would include adoption of all mitigation measures suggested in the EIR.

37. The commenter's request for analysis of a restructured project alternative is noted. The project is not intended as a bedroom community for the East Bay area, but rather as a residential/resort community. It is not clear that a much expanded employment component would significantly reduce the project's traffic and air quality impacts as it could, instead, draw commuters from other areas

of the San Joaquin Valley. The EIR contains a reasonable range of alternatives as required by CEQA Section 15126(d)(5).

38. An energy analysis is added to the EIR following page IV-309. It is attached as Appendix F of this FEIR.

39. The commenter's opinion is noted. The EIR contains a detailed analysis of Phase 1 potential impacts. For a description of the purpose of the EIR, refer to the revised Introduction of the DEIR in response to comment 1 of the Merced County Planning Department October 15, 1992 comment letter.

40. The footnote for Table III.D-E states that an additional 55 single family dwelling units (that is, in addition to the 1,965) are proposed to be developed on the polo center site towards the end of Phase 1. Therefore, the total number of units for Phase 1 would be 2020 as used for calculations of school child generation in Table IV.F-G.

41. Comment noted. The EIR identified the potential for future slope instability problems along Oak Flat Parkway and noted that landslides on the hillsides could block the road. The construction of the road according to engineering specifications to be determined by a detailed geotechnical study was recommended, in addition to the provision of an alternative access route. A detailed geotechnical investigation would be prepared, and specific areas in need of land stability mitigation identified, at the time of preparation of the Improvement Plans for the Oak Flat Road access. Mitigation measure 23 on page IV-67 of the EIR addresses the potential instability problems along the access road.

42. The comments on project slope grading are noted. The grading limitation on slopes greater than 25 percent (mitigation 5 on page IV-65) is an EIR-recommended measure. It is up to the County to adopt the mitigation measure as a condition of project approval.

A slope map indicating the location of slopes equal to or greater than 25 percent within the areas proposed for development within Phase 1 is provided following this page. Approximately 900 acres of development area, including residential, employment and road uses, are within Phase 1. This area does not include the hill or creekside preserves or the vineyard and golf course areas. Roughly 140 acres of development areas are on slopes greater than 25 percent. This acreage represents approximately 16 percent of the proposed Phase 1 development area and 7 percent of the total Phase 1 area. According to the applicant's land use planner, approximately 40 percent of the 140 acres (56 acres) might actually be graded. The majority of the ungraded slopes of over 25 percent would be preserved within the private open space areas (i.e., back yards).



11-25-91 (STC102)

 Areas in Excess of 25% Slopes

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Phase I Slope Map

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43. A Mitigation Monitoring Program will be submitted to the County prior to issuance of any residential building permits. The program will describe the timing and parties responsible for implementing all mitigation measures included in the EIR, per AB 3180 requirements.
44. See U.S. Fish and Wildlife Service letter, responses to comments 2 and 8; and California Department of Fish and Game letter (Garrison), responses to comments 2, 3, 4, and 5. The potential loss of a maximum of 28.25 acres of oak woodland and over 600 individual blue oaks present in the oak savanna in the Phase 1 area would be a significant impact.
45. Refer to response to comment 6b of the U.S. Fish and Wildlife Service October 16, 1992 comment letter for an explanation of the role of the U.S. Fish and Wildlife Service. The Department of Fish and Game is a responsible agency and trustee agency under CEQA. The Department issues Streambed Alteration Agreements which the project will be required to obtain. The Department is responsible for enforcement of the state's Endangered Species Act which the project will need to comply with due to its impacts on kit fox. Potentially the project may need to obtain a "2081" permit pursuant to the state Endangered Species Act.
46. See response to comment 8 of the U.S. Fish and Wildlife Service October 16, 1992 comment letter.
47. See response to comment 8 of the U.S. Fish and Wildlife Service October 16, 1992 comment letter.
48. See U.S. Fish and Wildlife Service letter, response to comment 1.
49. a. The report on the results of the 1990 kit fox survey were inadvertently omitted from Appendix D of the Draft EIR. It is included as Appendix C to this FEIR. The methodology used in this survey conformed to the Department of Fish and Game's 1989 Region 4 methodologies and are described in the attached report.
- b. Refer to response to comment 6b of the U.S. Fish and Wildlife Service October 16, 1992 comment letter. The Phase I area will be surveyed in 1993 using the Service's survey protocols which includes the use of camera stations.
50. The Phase I area was surveyed for kit fox because of the presence of physically suitable habitat and the area is included in the Service's mapped range of the species. As discussed in response to comment 6a of the U.S. Fish and Wildlife Service October 16, 1992 comment letter, no evidence of kit fox presence was found and kit fox are not thought to occupy the Phase I development area. The ultimate determination

will be made by the Service during the Section 7 consultation after the completion of the 1993 survey.

51. Refer to response to comment 13 of this letter for construction-related mitigation measures. The results of consultation with the U.S. Fish and Wildlife Service cannot be determined at this time, but conceivably could result in changes to the project.
52. Refer to response to comment 8 of the U.S. Fish and Wildlife Service October 16, 1992 comment letter.
53. Water rights to the Marshall-Davis well site, located approximately eight miles east of the site and shown in Figure IV.F-1 on page IV-171 of the EIR, have been acquired by the applicant. The applicant would need to acquire rights-of-way to deliver water from the Marshall and Davis well to the site. It is noted that the County should consider the policy implications of permitting use of agricultural water (and the resulting possible removal of agricultural land from production) in its consideration of project approval. See response to comment 20, above, for potential reservoir rupture impacts.

Based on preliminary planning, the Salado Creek intake pipeline along Oak Flat Road would be a 36-inch diameter pipeline designed to convey water from the California Aqueduct to Oak Flat Village. Upon reaching Oak Flat Village, the pipeline would branch, with one branch serving raw water for irrigation to Oak Flat Village and a portion of Indian Rocks Village, and the other conveying water to the water treatment plant to provide treated water for Oak Flat and Copper Mountain villages. The pipeline would begin at a turnout from the California Aqueduct in the vicinity of the Oak Flat Road crossing of the Aqueduct. The turnout would be a reinforced concrete structure, designed to California Department of Water Resources standards.

The pipeline would generally follow the alignment of the Entry Road, although an exact alignment has not been selected. The pipeline would include four pumping plants to lift water from the Aqueduct to Oak Flat Village. Pumping units would be powered by electric motors or natural gas engines, and designed to be quiet and unobtrusive. The first pumping plant would be near the turnout, and the fourth plant would be within Oak Flat Village. The second and third plants would be located along the Entry Road.

A pipeline leading from the Ascaso well to the vicinity of the turnout from the California Aqueduct would also be required. This pipeline would be connected to the Salado Creek Intake pipeline near the turnout. The size of this pipeline has been estimated to be 14 inches in diameter. A pumping plant would be required near the well site to boost the water to the connection with the Salado Creek Intake.



Although an alignment for this pipeline has not been selected, it is expected that the pipeline would be placed adjacent to existing County roads, preferably within the County right-of-way. This would minimize disruption to existing land uses. The pipeline would be designed to County standards.

Pipelines would run under or adjacent to the proposed Oak Flat Parkway, the impacts of which have been assessed in the EIR. Use of water from the Marshall and Davis well could result in loss of some of the agricultural uses of the site. This would constitute a loss of prime agricultural land, and be a potentially significant impact.

Pumping schedules (monthly water delivery schedules) are addressed in response to comment 1 of the Salado Water District October 13, 1992.

54. Comment noted. See response to comment 22, above.
55. Comment noted. See response to comment 1 of the Newman-Crows Landing Unified School District comment letter. See response to Comment 1 of the Newman-Crows Landing Unified School District October 13, 1992 comment letter. The length of time students spend on a bus is not a public safety issue. Obviously, shorter transit times are preferable to longer transit times. Students are currently bussed for up to one hour in school districts in the County, however there are no students bused farther than ten miles in the Newman-Crows Landing Unified School District (Edward Williams, pers. comm.). It is likely that bussing students from the project site to schools in Newman would take up to one hour.
56. For a discussion of the developer fees for school improvements required to offset school impacts, refer to response to comment 1 of the Newman-Crows Landing Unified School District October 13, 1992 comment letter. Responses to comments 4 and 6 of that same letter discusses provision of school facilities and cumulative impacts of regional projects on the School District.
57. Refer to response to comment number 25, above, for reference to a fuel reduction plan for Phase 1. Fuel reduction plans for Phases 2-4 should be prepared with the development plans for those areas.
58. See mitigation measure 12 on page IV-93 of the EIR. The applicant would be required to remediate any contaminated soils found during project development.

# SAAG

Stanislaus Area  
Association of Governments

1315 I Street  
Modesto, California 95354-0913  
(209) 558-7830  
Fax 558-7833

October 21, 1992

Mr. Bob Kachel, Senior Planner  
Stanislaus County  
Planning and Community Development Department  
1100 H Street  
Modesto, CA 95354

RECEIVED

OCT 22 1992

STANISLAUS COUNTY  
PLANNING COMMISSION

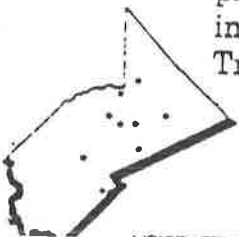
RE: Comments on Diablo Grande DEIR

Dear Bob:

Thank you for the opportunity to comment on the DEIR for the Diablo Grande Specific Plan/General Plan/Rezone.

We received a copy of the comments from Caltrans District 10 and hope that the proponent of Diablo Grande will respond to Caltrans' concerns. SAAG staff also have the following comments:

1. How does the project take into account SAAG's recently approved population projections for Stanislaus County and its cities? It does not seem that they have been considered. These revised projections are based upon Department of Finance figures, and are currently being used in the tri-county/Caltrans I-5 Strategic Plan study assumptions, the SAAG model calibration tasks, and the SAAG Regional Transportation Plan update and Environmental Impact Report preparation, as well as the Congestion Management Program.
2. SAAG is in the process of updating its Regional Transportation Plan, and the regional and federal transportation improvement programs. How does Diablo Grande fit into this long-range plan, and the short-range improvement programs? We have received no guidance from the project proponent on this to date.
3. We are also concerned about the impact of such a project on the federal air quality conformity process. The conformity process mandates that emissions reductions targets not be exceeded. The transportation model and emissions factors associated with it will utilize updated demographic projections and will provide the basis for those targets. Federal funding for transportation projects in Stanislaus County would be potentially jeopardized should SAAG's Regional Transportation Plan and Transportation Improvement Program fail to conform.





Consequently, how can traffic generated by the project be accommodated if Federal funds cannot be used to widen I-5? We would like to reiterate Caltrans' concerns on reaching a consensus on the project's planning level design concept and scope prior to the initiation of a Project Study Report, and prior to the finalization of mitigation measures.

4. How does the project fit into the I-5 Strategic Plan? Incremental and cumulative improvements to that corridor over the next 30 years should be included in the environmental analysis and the I-5 Study as it is essential for the Diablo Grande project to contribute its fair share in mitigating those impacts.

If you have any questions regarding these comments, please call me at 558-7830.

Cordially,



Greg Steel  
Executive Director

GS:MM  
*mm*

f-c/2508

3 (Cont'd)

4

**RESPONSES TO STANISLAUS AREA ASSOCIATION OF GOVERNMENTS  
OCTOBER 21, 1992 COMMENT LETTER**

1. At the time that the EIR was prepared, 1990 Census background information was available but projections based on that information were not yet available. The 1990 Census background information is shown in Table IV.A-B.
2. The traffic section of the EIR provides both local and regional mitigation requirements for project and cumulative traffic conditions. As the County Regional Plan has not been completed, it is not feasible to relate the off-site traffic mitigation measures to specific regional plan elements. However, the mitigation measures detailed within the EIR can be incorporated by the County into the regional planning process. The traffic projections, roadway requirements and intersection geometric recommendations are all detailed within the EIR.
3. The AQAP estimates that, even with the projected 29 percent population growth (i.e., from 2.77 million to 3.58 million) and 35 percent employment growth (i.e., from 1.04 million to 1.41 million) foreseen in the San Joaquin Valley over the next eight years, emissions of ozone precursors could be reduced by about 30 percent, if all the control measures proposed by the AQAP were fully implemented. The project's increment to the Valley's population and employment base will not, by itself, invalidate the estimates which underlie the AQAP. The only question remaining is whether future air pollutant emissions in the Valley would be less if the growth associated with development on the project site occurred elsewhere in the Valley. Unfortunately, this question can not be answered from existing data.
4. Refer to response to comments 5 and 16 of California Department of Transportation October 16, 1992.

Stanislaus County Planning Dept.  
1100 H Street  
Modesto, California 95354

RECEIVED  
10/19/75  
STANISLAUS COUNTY  
PLANNING COMMISSION

Dear Mr. Robert Kachel,

In regards to the "Diablo Grande Development" my sister, Mary McCoy of 2448 Avenida Canora, Alpine Calif., 91901 and myself, Loretta Kellner Youngman of 8622 Lasaine Ave., Northridge, Calif. 91325, wish to voice some objections against the source of water proposed to be used for this residential and golf course development.

As absentee farm property owners, in the San Joaquin Valley, we have only very recently been made aware of the "Diablo Grande" Project, which may adversely effect us. Specifically, we are owners of 164 acres adjacent to the Escaso property located on Davis Road East of Ward Ave. South of Marshall in Stanislaus County. The Escaso property has been purchased recently by the parties involved in the "Diablo Grande Project." We were told the primary reason for the property purchase was to acquire the water rights of that property, which has a very good producing well on the upper end of the ranch.

The water from this well is supposed to be used for the purposed development 6-7 miles away from the source. Our adjacent property is dependent upon Salado Water District and upon the one well which is

located on it for sufficient water to farm.

Every year since the drought Salado Water District has not nearly had sufficient water and were it not for our well, possibly only 25% or less of our property would be cultivated, the rest lying fallow - due to lack of water.

In other words, we are dependant upon the well which is on our property and any strong draw down of water from the underlying aquifer will effect our well which is approximately 12 years old. Because the new well on the Escaso ranch will be expected to provide water for a commercial project so far from its source and perhaps do double duty by continuing to provide water to farm the Escaso ranch, we see no other conclusion than a great deterioration of our water supply, to the point of us losing ground production.

This lack of ground water plus a drought could be an economic disaster for the people dependant upon its resources as productive agricultural land. Jobs would be lost for the lessees and their personnel. We the owners and our families are dependant upon the income from this property.

The San Joaquin Valley is one of the richest agricultural areas in California and is dependant upon good water sources to continue in order to produce quality crops to feed the people.

To reiterate, we object to the following:

(1) The mining of water to support a commercial

housing/golfing project; (2) The use of agricultural well water to be sent out of the local district; (3) The loss of prime agricultural land due to a preventable lack of water; (4) Loss of agricultural jobs and income due to the Diablo Grande Project.

Please consider these objections seriously in your environmental reports and consider the harm to the neighboring properties, due to the over use of ground water which would come about through the Diablo Grande Project, unless alternate sources of water are used or the "Diablo Grande Development" is cancelled.

Sincerely,

*Donella Williams, Jr.*

**RESPONSES TO LORETTA K. YOUNGMAN DECEMBER 18, 1992 COMMENT LETTER**

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2  
3 1. Comment noted. Water issues are discussed on pages IV-164 through  
4 IV-179 of the EIR. See also response to comment 1 of the Salado  
5 Water District October 13, 1992 comment letter.  
6

7 2. The commenter's objections are noted. Please refer to responses to  
8 comment 1 of the Salado Water District October 13, 1992 comment  
9 letter. Water issues are discussed on pages IV-164 through IV-179 of  
10 the EIR.

11 Impacts to agricultural land resources are discussed on pages IV-26 and  
12 IV-31 of the EIR. Impacts to employment are discussed on pages IV-24  
13 and IV-31 of the EIR.  
14  
15

## SUMMARY OF DIABLO GRANDE EIR COMMENTS

Staff Introduction/comment hearing opened

**MR. STEVE BURKE**

Discussed project with Eric Parfrey

Read San Joaquin County Comments into record, specifically concerned with:  
Kit fox; Water supply; and Cumulative transportation impacts on I-5 corridor.

The DEIR is missing detailed descriptions of individual chapters of the specific plan; It doesn't describe the policies, development standards, and mitigation standards in the Specific Plan

This makes it difficult to determine how specific mitigation measures recommended in the EIR can be implemented within the policies of the Specific Plan. There's no clear connection between Specific Plan policies and mitigation measures in the DEIR

Some mitigation measures are included which apply only to Phase 1; and not the overall program. Cumulative impacts of the entire project must be mitigated in this EIR.

Is there only one Specific Plan covering the entire buildout of the project, or are there phased Specific Plans?

Will additional or supplemental EIR's be prepared for post-phase I development?

Kit fox: San Joaquin County has an HCP. In general, DEIR survey adequately discusses potential for kit fox, however, it fails to mention the provisions of the Endangered Species Act (ESA), and mitigation measures are far short of other mitigation programs for urban development in kit fox habitat areas. Add discussion of ESA and augment mitigation measures (i.e. HCP) in the FEIR.

Need to address ramifications of US and California Endangered Species Acts. Need to discuss how Take of kit fox will be mitigated. Address how developer may be required to set aside on-site lands or purchase off-site lands for mitigation at 3:1 ratio. USFWS will probably determine that a "taking" will occur due to the project, and thus a 3:1 mitigation should be adopted similar to other such projects in the state.

Applicant risks a lot of money by perusing this plan without knowing what areas of the site will need to be preserved, or if the 3:1 mitigation ratio is financially feasible.

EIR doesn't adequately address impacts of the project on migration patterns of kit fox

CEQA section 15182 says that no residential project that comes under the scope of a specific plan requires subsequent CEQA review; the EIR has an astounding lack of specificity and reliance on future studies; CEQA says you cant do that. This sets the stage for future projects to get by without adequate review.

11

This EIR is at level of ADEIR. Not adequate for DEIR.

12

### **TOMMI LOU CAROSELLA**

Has problems with lack of specificity in protection wildlife habitat. Omits usual 3:1 mitigation.

13

EIR acknowledges growth-inducing potential of project; it mentions possible three approaches but doesn't specify specific mitigation.

14

Section IV, p. 15, Stanislaus County General Plan, policy 7, requires creek protection. The project has creeks in most urbanized part of the project. The EIR says these creeks and their corridors will be preserved primarily in their natural condition except for road crossings, golf course improvements, and creation of ponds; it doesn't mention alteration of the natural flows of the streams, which will be totally disrupted by using the streams for waste water recycling. Golf course improvements are not necessary or compatible with natural conditions/wildlife. Pond-building is not maintaining the natural condition of the streams. Changing stream flows encourages the establishment of exotic species at the expense of native species adapted to the site's natural conditions. Therefore the EIR's assertion that the project is compatible with the county General Plan policy on streams is false and misleading.

15

The DEIR (p IV-8) is also misleading when it attempts to justify the project as alleviating a perceived housing shortage in Stanislaus County. The EIR statement that the number of people per housing unit has risen in the County since 1980 does not mean that the county's housing starts have been unable to meet demand. Instead, it probably means that people were having children. The same section concludes that increase in housing was not a significant factor in the increase in population. How much of the population increase would have been possible without the additional 30,000 houses? Building new housing is a major growth inducement.

16

How accurate is EIR's assessment of an additional 12,000 people on air quality? Is the 2% increment accurate?

17

Water use assessment is questionable.

18

Assessment of jobs in the research campus may not be adequate.

19

DEIR has other [unspecified] inadequacies.

20



**AL BRIZARD**

Attended meeting in Patterson for previous development; his question then and now is "what about water?"

Have developers obtained any rights to any wells that are not part of the property in question within eight to ten miles of the project boundaries?

He has heard many rumors regarding options on wells to provide water to this project. These wells would probably run 24-hours/day, 365 days/year and could have disastrous impacts on the local aquifer.

**HAROLD ARAMBELL**

Also concerned with water impacts. He is very close to project well sites and irrigates 152 acres of walnuts; it's his sole source of water.

He also is concerned that the project also sets precedent for transporting water out of the area for different project.

**TIM FORD**

Surprised that EIR is out for review because it is so inadequate.

Summary identifies routinely the cursory nature of this EIR. Plans to be developed later but with no CEQA or public input at that time. How can anyone have any idea specifically of what the impact would be, their extent, or how they would be mitigated. Needs more information. For example, wildlife study spent two days on 3400-acre portion of site, and two days on the remaining 25,000 acres. Oristimba Creek not surveyed; Crow Creek only a small portion was surveyed (p IV-100). He doesn't think this is adequate.

P IV-109 says formal surveys for plant species of special concern were not conducted.

Water supply issue was left for separate subsequent CEQA review. Impacts ranging from the Yuba River to Madera County are not even being looked at in this EIR. EIR talks about spreading basins near Mendota Pool with berms for wildlife habitat. This would require grading and alteration of existing habitat, which is not addressed in this EIR. Also omitted are impacts of water delivery system.

No schools anticipated in 12-13,000 person development. Poor planning.

Figure IV.B.5 (Grading): The project will move hills, and the EIR states that grading will occur on thousands of acres (6,000-13,000 acres). But it doesn't say where grading will take place, or what the impacts would be.

31

Oaks: EIR proposes 5:1 replacement ratio. Five oak seedlings doesn't adequately mitigate the loss of a mature oak tree.

32

The EIR contains no information on inventory of area's resources and not enough information to really comprehend project impacts.

33

The Diablo Range in the County is relatively undeveloped and represents a significant wildland/open space resource. The EIR needs more scrutiny for a project with six golf courses, spanning four drainages, and including four wastewater treatment plants.

34

### **TOM RETTIG**

Thinks water is very important issue.

35

Thinks that there is quite a bit in EIR. Supports putting towns in that area. He had a conversation with a kit fox at his exercise class. It invited him to go to Mexico with him to avoid regulations. He intends to go to Mexico with the fox.

36

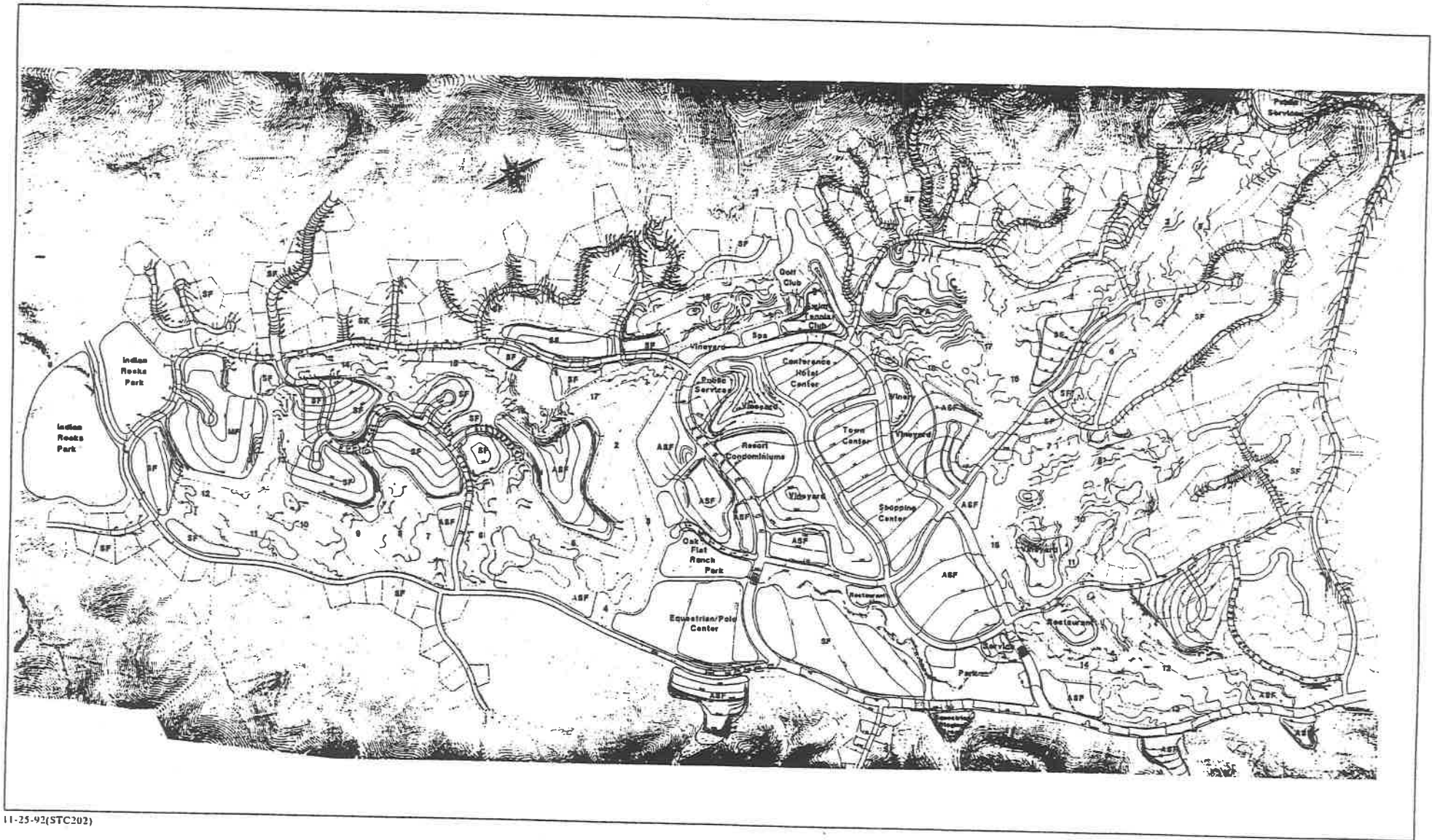
Comment period concluded.

**RESPONSES TO COMMENTS PRESENTED AT THE OCTOBER 1, 1992 PUBLIC HEARING  
ON DIABLO GRANDE DRAFT EIR**

1. See responses to specific comments presented by San Joaquin County Community Development Department October 1, 1992 comment letter.
2. See response to comment 3 in the by San Joaquin County Community Development Department October 1, 1992 comment letter.
3. See response to comment 3 in the by San Joaquin County Community Development Department October 1, 1992 comment letter.
4. See response to comment 6 in the by San Joaquin County Community Development Department October 1, 1992 comment letter.
5. See response to comment 7 in the by San Joaquin County Community Development Department October 1, 1992 comment letter.
6. See response to comment 7 in the by San Joaquin County Community Development Department October 1, 1992 comment letter.
7. Refer to responses to comments 6a, 6b, 6c, 11, and 13 of the U.S. Fish and Wildlife Service October 16, 1992 comment letter, comments 11 and 12 of the San Joaquin County Community Development Department October 1, 1992 comment letter, and comment 14 of the Thomas Reid Associates October 16, 1992 comment letter.
8. Refer to responses to comments 6a, 6b, 6c, 11, and 13 of the U.S. Fish and Wildlife Service October 16, 1992 comment letter, comments 11 and 12 of the San Joaquin County Community Development Department October 1, 1992 comment letter, and comment 14 of the Thomas Reid Associates October 16, 1992 comment letter.
9. Comment noted.
10. Refer to response to comment 12a of the San Joaquin County Community Development Department October 1, 1992 comment letter.
11. See response to comment 1 of the Merced County Planning Department October 15, 1992 comment letter.
12. The commenter's opinion is noted.
13. Refer to response to comment 6 of the U.S. Fish and Wildlife Service October 16, 1992 comment letter,
14. Mitigations for growth-inducing impacts are discussed on pages IV-35 and IV-36 of the EIR.

15. Comment noted. If wastewater is diverted into the streams, any discharge would be regulated by the Regional Water Quality Control Board. The construction of new ponds would be to replace filled stock ponds.
16. Comment noted. The EIR (p. IV-8) states: "Insofar as the 1980-1990 population growth rate exceeded the housing rate, new housing development apparently was not the primary inducement to countywide growth during the period". This statement is not meant to disregard new housing construction as a potentially growth-inducing activity. The statement is meant to imply that other growth-inducing forces contributed perhaps more significantly to burgeoning growth in Stanislaus County in the 1980s. These would be such growth-inducing forces as jobs, economics, life-style choices, climate, and fertility rates.
17. At this stage of project planning, it is not known whether any of the R&D or other uses proposed for the project site will include sources of air toxics. However, the EIR did point out, on page IV-298, lines 32-35, that such sources may come under SJVUAPCD rules and regulations.
18. Comment noted. See response to comment 19 of the Thomas Reid Associates October 16, 1992 comment letter.
19. The EIR (p. IV-24) describes five types of jobs which could be accommodated in the 77-acre employment generating land uses of Phase 1. Based on an average 17 jobs per acre, the EIR's projection is that approximately 1,310 potential jobs could be generated from the plan. The generating factor was provided by the applicant and was used for the project marketing studies. The purpose of this projection is to determine whether the Phase 1 long-term employment opportunities would be significant; for that limited purpose, the analysis is adequate.
20. Comment noted.
21. The commenter's question is not specific. Water issues are discussed on pages IV-164 through IV-179 of the EIR. See response to comment 14 of the San Joaquin County Community Development Department October 1, 1992 comment letter.
22. See response to comment 53 of the Thomas Reid Associates October 16, 1992 comment letter.
23. See response to comment 21, above.
24. The commenter's concerns are noted.
25. The commenter's concerns are noted.

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26. Comment noted.
  27. The EIR is for a General Plan amendment and rezoning for the entire property, and a development plan for the Village 1 area and associated improvements. Further environmental review will be conducted on the later phases of the project when specific development plans are submitted to the County. Necessary biological surveys will be conducted for these areas at that time.
  28. Refer to response to comment 8 of the U.S. Fish and Wildlife Service October 16, 1992 comment letter.
  29. See responses to comments 3 and 5 of the Stanislaus Natural Heritage Project October 19, 1992 comment letter.
  30. Provision of additional schools as part of the project will be determined based on the existing capacity of schools located near enough to the project site to receive bused students. Refer to response to comments 2, 4, and 8 of the Newman-Crows Landing Unified School District October 13, 1992 comment letter.
  31. Grading comment is noted. A figure depicting the Phase 1 Grading Plan has been provided on the following page. This figure is hereby inserted on page IV-59 of the EIR, following the onset of the Phase 1 grading impact discussion. This figure, together with the text on pages IV-59 through IV-60, describes the potential Phase 1 grading impacts.
  32. Refer to California Department of Fish and Game October 19, 1992 comment letter, responses 2, 3, 4, and 5.
  33. The commenter's opinion is noted.
  34. The commenter's concerns are noted. The Stanislaus County Board of Supervisors is responsible for determining whether the analysis contained in the EIR adequately scrutinizes the project's potential impacts.
  35. The commenter's concern is noted.
  36. Comment noted.



11-25-92(STC202)

LSA  
Scale in Feet  
0 952

Note: This grading plan is overlain on a previous version of Phase I Land Uses. Therefore, some land uses differ from the current land use plan analyzed in this EIR. Minor changes in this generalized grading plan would be needed to accommodate the currently proposed land use configurations.

Phase I Grading Plan



**STANISLAUS**  
MEDICAL CENTER

830 SCENIC DRIVE  
P.O. Box 3271  
MODESTO, CA 95353  
(209) 525-7000

RECEIVED  
MAY 21 1993

STANISLAUS COUNTY  
PLANNING COMMISSION

May 18, 1993

MEMO TO: Bob Kachel  
Stanislaus County Planning & Community Development

FROM: Beverly M. Finley *[Signature]*  
Chief Executive Officer

SUBJECT: ENVIRONMENTAL REFERRAL

I have reviewed environmental impact report "Diablo Grande" and determined this referral:

- ☐ Will not have a significant impact on Stanislaus Medical Center.
- ☒ May have a significant effect on the environment.
- ☐ No comments.

In addition, I have the following comments:

In September, 1992 I wrote stating that the Diablo Grande project would have no significant impact on Stanislaus Medical Center. Several variables have changed since September which may result in increased service demand resulting from this project. Most particularly the increase may occur in the areas of prevention and education, emergency services, specialty and sub-specialty clinical services, OB and pediatric services and finally Medi-Cal managed care.

Depending on the size and wage structure of the employees working and living near the project, these services could be significant. Residents living on the West Side of the County experience access problems if they are Medi-Cal eligible or indigents. Under managed care the access problem may be exacerbated. This may mean the establishment of service capacity in that side of the County. Prevention and education services will be imperative to these new residents who would not normally come to Modesto for their health care. The demand for Mental Health and substance abuse services will need to be evaluated as well. SMC currently experiences a significant demand for transfers from the emergency department at Del Puerto Hospital either because of access issues or because of the need for specialty services not available in the community. If we add the services that appropriately need to be included in the comprehensive health care services under managed care, the demand could be substantial.

It is SMC's plan to have the Momobile van available on the West Side but only on a recurring basis not as a fixed site. As the project is developed the actual demands on the County's health services system will be more clearly defined.

Perhaps mitigation of these concerns have been addressed by Del Puerto Hospital and community physicians. If that is true, the concerns raised may be minimal.

1  
(Cont'd)



1 **RESPONSES TO STANISLAUS MEDICAL CENTER MAY 18, 1993**  
2 **COMMENT LETTER**  
3  
4

- 5 1. The commenter's concerns are noted. Any analysis of the increased  
6 impacts resulting from future managed medical care requirements  
7 could be speculative. See also responses to the Henn, Etzel and  
8 Mellon October 16, 1992 comment letter.



# Stanislaus County

## Department of Public Works

1100 H STREET  
MODESTO, CALIFORNIA 95354

May 26, 1993

- ADMINISTRATIVE DIVISION (209) 525-6550
- ENGINEERING DIVISION (209) 525-6552
- BUILDING INSPECTION (209) 525-6557
- TRANSIT OPERATION (209) 525-6552
- ROAD DIVISION (209) 525-4130
- SANITARY LANDFILL (209) 837-4800
- EQUIPMENT DIVISION (209) 525-4145
- BUILDING MAINTENANCE (209) 525-4108
- FAX (209) 525-6507

MEMO TO: Bob Kachel, Senior Planner

FROM: Charles Barnes, Assistant Engineer CB

SUBJECT: Diablo Grande Final EIR

I have the following comments:

1. Unless LSA's traffic engineer can provide data to support their recommended speed limits to "reduce road kill" that mitigation measure must be removed from the EIR. To state the roads "shall be designed for a maximum speed limit of 35 MPH for parkways and 25 MPH for major collectors" to reduce road kill flies in the face of sound engineering design. To artificially set speed limits of 25 or 35 MPH will more than likely make them unenforceable and accomplish nothing. 1
2. The EIR states that Oak Flat Road must be widened to four lanes when the peak hour traffic exceeds 700 vehicles. Phase 1 development will exceed that threshold. Therefore, Phase 1 must be reduced to generate only 700 peak hour trips or the proponents must devise a method to assure Oak Flat Road will be widened as required by the EIR. 2

Let me know if you have any questions.

CB:

cc: Mary Hemminger, CEO

**RESPONSES TO STANISLAUS COUNTY DEPARTMENT OF PUBLIC WORKS  
MAY 26, 1993 COMMENT LETTER**

1. The recommended speed limits are consistent with the U.S. Fish and Wildlife Service's "Standard Recommendations For Projects of the San Joaquin Kit Fox" (April, 1989).
2. Comment noted. This methodology should be included in the Mitigation Monitoring and Reporting Program, and should be made a condition of project approval.

## APPENDICES

**APPENDIX A  
BOTANICAL SURVEY**

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**DIABLO GRANDE PLANNED  
DEVELOPMENT AND RESORT**

**BOTANICAL SURVEY  
FOR  
SENSITIVE PLANT SPECIES**

**STANISLAUS COUNTY, CA**

---

*Prepared by:*

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916/ 427-0703

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Contact: Ms. Cathy Robocker

JUNE 1993

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# INTRODUCTION

## Purpose and Objectives

The purpose of the botanical surveys was to determine if any populations of rare, endangered, or threatened plant species of concern to state or federal agencies occur within the Phase 1 study area of the proposed Diablo Grande Planned Residential and Resort Community. This study was conducted as part of an EIR being prepared to document the existing biological resources in accordance with CEQA guidelines.

Surveys were conducted for a total of 16 species. These included:

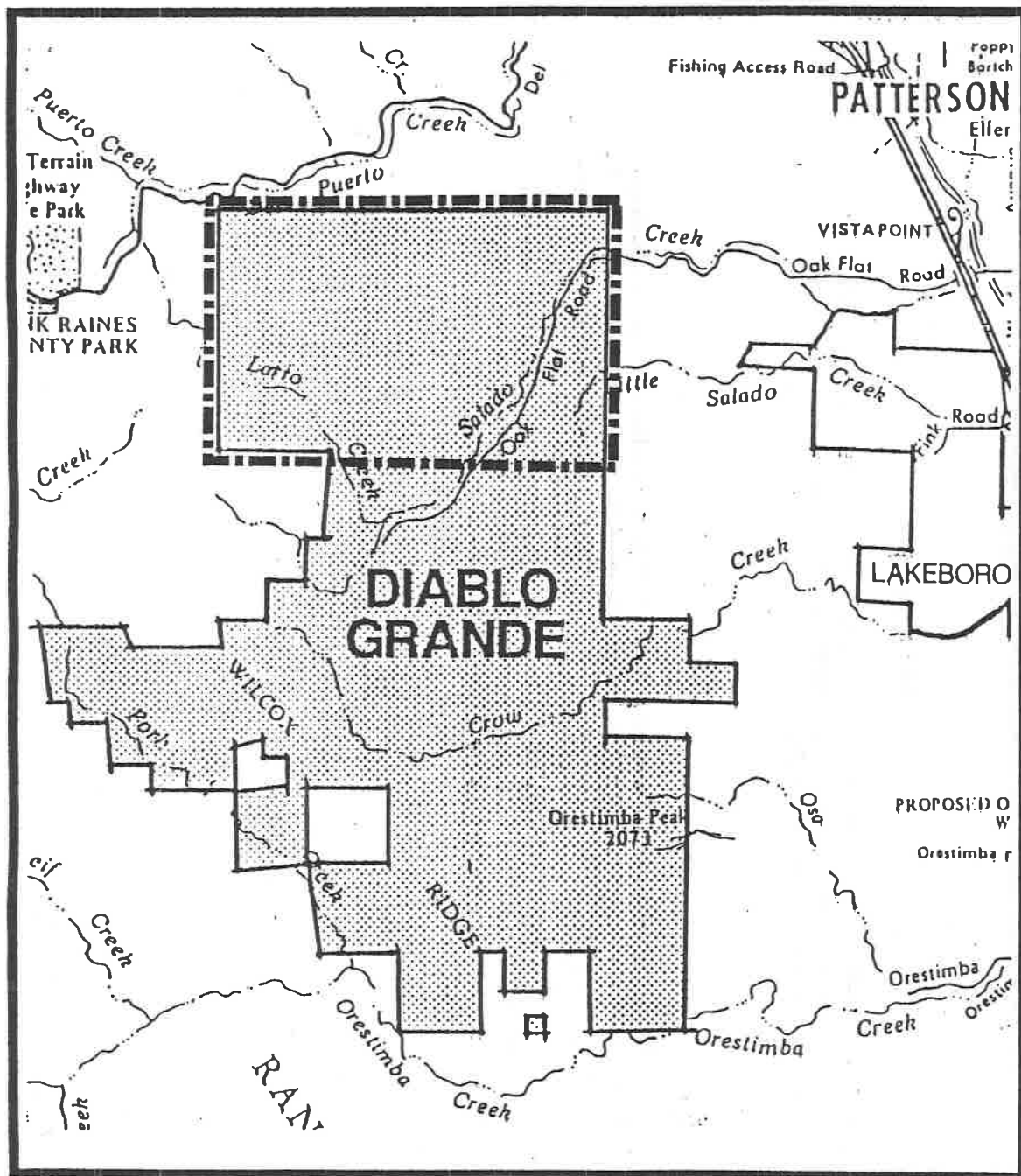
<i>Alloycarya glaber</i>	<i>Delphinium recurvatum</i>
<i>Amsinckia furcata</i>	<i>Eryngium spinosepalum</i>
<i>Campanula sharsmithiae</i>	<i>Eschscholzia rhombipetala</i>
<i>Cirsium campylon</i>	<i>Fritillaria agrestis</i>
<i>Cordylanthus mollis</i> ssp. <i>hispidus</i>	<i>Fritillaria falcata</i>
<i>Cordylanthus palmatus</i>	<i>Grindelia camporum</i> var. <i>parviflora</i>
<i>Coreopsis hamiltonii</i>	<i>Lotus rubriflorus</i>
<i>Delphinium gypsophilum</i> ssp. <i>gypsophilum</i>	<i>Phacelia phacelioides</i>

## Study Area

The boundaries for the Phase I project study area were provided by Diablo Grande. The botanical study area encompassed approximately 2,500 acres, and occurs in western Stanislaus County, California (see Figure 1).

## METHODS

Descriptions of species of concern presented in the DEIR formed the initial list for this study. These data were confirmed and supplemented by information obtained from the computerized California Natural Diversity Data Base (RareFind; 1993). A total of 16 species of concern to the California Department of Fish and Game; U.S. Fish and Wildlife Service; and/or the California Native Plant Society were ultimately identified for which surveys were conducted. The following steps outline the general process followed for the Diablo Grande sensitive species surveys. Two views of the study area are shown in Figure 2.



Diablo Grande  
Phase 1

Figure 1.

Sensitive Plant Survey  
April - May, 1993

Project Study Site

 Phase 1 Boundary

*Sycamore Environmental Consultants*

Basemap: Diablo Grande Area Map

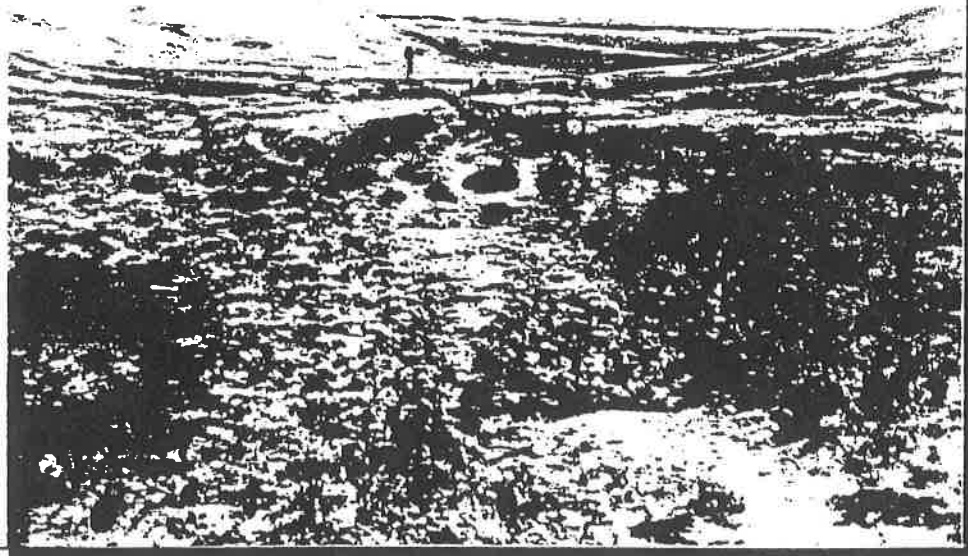
Not to Scale

**FIGURE 2.**

Rangeland (non-native grassland in foreground. Saledo Creek and Blue oak woodland in background. View toward north.



View of alkaline soils in drainage area near vicinity of proposed access road. Del Puerto Road in far background.



- ☐ Surveys for species of concern were conducted in accordance with accepted procedures as described in Nelson (*Rare Plant Surveys: Techniques for Impact Assessment*, Natural Areas Journal, no date, Vol. 5:18-30), and California Department of Fish and Game guidelines.
- ☐ A computerized search of CNDDDB RareFind for Copper Mt. and Patterson U.S.G.S. topographic quads was conducted to identify any species in the Phase 1 study area not currently on the list of species of concern.
- ☐ A tabular matrix of the habitat requirements and blooming times for all species of concern was prepared.
- ☐ Locations of potential habitat in the study area were determined for each species of concern. Habitat potential was based on information gathered from initial field surveys, topographic maps, aerial photos, and available taxonomic information.
- ☐ The initial field surveys focused on areas of known potential habitat during the appropriate time of the year.
- ☐ In areas of homogeneous vegetation (e.g., grazed grasslands), a random walk search pattern was used. In smaller areas consisting of specialized habitat types (e.g., rocky outcrops, wetland habitats, or specialized soil types), a more systematic transect pattern was employed to ensure full coverage.
- ☐ Voucher specimens were collected for many of the native species encountered. (All of the identified sensitive species potentially occurring in the Phase 1 area are native species.) Specimens were collected in accordance with standard, professional collecting practices (e.g., Univ. of California Herbarium. 1975. *Selecting and preparing flowering plant specimens*. Univ. of CA Leaflet 2787). Specimens were dried, chilled in a deep freeze for at least four days, and transferred to a standard herbarium cabinet. Some of the voucher specimens from this study will be deposited in the U.C. Berkeley Herbarium. The remainder will be held in the Sycamore Herbarium.

### Literature Search

Information on the biology, distribution, taxonomy, legal status, and other aspects of the sensitive species was obtained from documents on file in the library of Sycamore Environmental Consultants, and from status reports prepared by the California Department of Fish and Game.

Taxonomic data, common names, blooming times, and other information were obtained from Abrams, 1923-60; CNPS, 1988a; Hickman, 1993; Munz, 1959; and various technical publications.

### Field Surveys

Field surveys of the study area were conducted from April to May 1993, using standard survey methods recommended by the California Native Plant Society (1988), and others (Nelson, 1986). The field surveys consisted of conducting detailed searches within the appropriate habitat types for each of the 16 species of concern.

## RESULTS and DISCUSSION

The survey focused on 16 species of concern. These are listed in Table 1, along with their blooming period, habitat, and status.

### Description of Species

1. ***Alloycarya glaber*** (Glabrous alloycarya). Glabrous alloycarya is an annual species in the Boraginaceae family. This taxon is currently treated as *Plagiobothrys glaber* (A. Gray) I. M. Johnston (Hairless popcorn-flower) in the Jepson Manual (Messick, T. in Hickman, ed., 1983), which is taken as the current authority on the species. This species, which occurred in wet, alkaline soil in valleys and coastal marshes, is presumed extinct (Ibid.). The only suitable habitat in the study area occurs along a drainage south of Del Puerto Road parallel with the new access road right-of-way. However, no species of *Plagiobothrys* were found in this habitat.
2. ***Amsinckia furcata*** (Forked fiddleneck). Forked fiddleneck is an annual species in the Boraginaceae family. This taxon is currently treated as *Amsinckia vermicosa* Hook. & Arn. var. *furcata* (Suksd.) Hoover, in the Jepson Manual (Ganders, F., in Hickman, 1983), which is taken as the current authority on the species. This species occurs in loose, shaly slopes, a habitat type not present in the Phase 1 study area, but which may be present in hilly areas outside of it. The hairless Forked fiddleneck is readily distinguished from *Amsinckia menziesii* which has abundant, stiff hairs, and is a common weed in the Phase 1 area.
3. ***Campanula sharsmithiae*** (Sharsmith's harebell). Sharsmith's harebell is an annual species in the Campanulaceae family. No *Campanula* species were observed in the Phase 1 study area. Sharsmith's harebell occurs on talus slopes at about 1,300 feet. It is unlikely that this species would occur in the Phase 1 study area because talus slope habitat is lacking. In addition, it occurs at elevations much higher than the study area.
4. ***Cirsium campylon*** (Hamilton thistle). Hamilton thistle is a perennial species in the Asteraceae family. This taxon is currently treated as *Cirsium fontinale* E. Greene var. *campylon* (H. Sharsm.) Keil & C. Turner, in the Jepson Manual (Keil & Turner in Hickman, ed., 1983), which is taken as the current authority on the species. This species was not observed in the Phase 1 study area. It normally occurs in serpentine seeps and streams at elevations above 1,000 feet.
5. ***Cordylanthus mollis* ssp. *hispidus*** (Soft bird's beak). Soft bird's beak is an annual species in the Scrophulariaceae family. It occurs in saline marshes and flats at less than 30 feet elevation, and is currently known only from Solano, Merced, and Kern counties. The only potentially suitable habitat in the study area occurs along an alkaline drainage south of Del Puerto Road that parallels the new access road right-of-way (see Figure 3). However, no *Cordylanthus* species were observed here or elsewhere in the Phase 1 study area in surveys through May, 1993. As discussed below under Mitigation Measures, an additional survey for this species will be conducted in July 1993.

**TABLL 1. Sensitive Plant Species Investigated in Diablo Granue Phase 1 Study Area.**

(Composite of taxa identified by County's Consultant and RareFind Printout, April 1993)

Species	Common Name	Blooms	Habitat	State Category <sup>1</sup>	Federal Category <sup>2</sup>	CNPS Category <sup>3</sup>
1. <i>Alloycarya glaber</i>	Glabrous alloycarya	Apr-May	Alkaline soils in valleys, coastal marshes; <330 ft.		C2	3 ?-?-3
2. <i>Amsinckia furcata</i>	Forked fiddleneck	Mar-May	Loose, shale slopes 165-4590 ft.		C2	1B 1-2-3
3. <i>Campanula sharsmithiae</i>	Sharsmith's harebell	May-Jun	Talus slopes ca. 1300 ft. Mt. Hamilton Range.		C2	1B 3-3-3
4. <i>Cirsium campylon</i>	Mt. Hamilton thistle	May-Jul	1000-2460 ft.		C2	1B 2-2-3
5. <i>Cordylanthus mollis</i> ssp. <i>hispidus</i>	Soft bird's beak	Jul?	Saline marsh and flats; <30 ft		C2	1B 2-3-3
6. <i>Cordylanthus palmatus</i>	Palmate-bracted bird's beak	Jul-Aug	Alkaline marsh; <195 ft.	CE	FE	1B 3-3-3
7. <i>Coreopsis hamiltonii</i>	Hamilton coreopsis	Mar-May	Dry, exposed slopes 2000-4200 ft.		C2	1B 3-2-3
8. <i>Delphinium gypsophilum</i> ssp. <i>gypsophilum</i>	Interior CA larkspur	Apr-May	Slopes in grassland, open oak woodland; 500-3900 ft.			4 1-2-3
9. <i>Delphinium recurvatum</i>	Recurved larkspur	Mar-May	Poorly drained, fine, alkaline soils, Atriplex scrub; <2000 ft.			1B 1-2-3
10. <i>Eryngium spinosepalum</i>	Spiny-sepaled button celery	Jun-Aug	Vernal pools, depressions; 330-650 ft.		C2	1B 3-2-3
11. <i>Eschscholzia rhombipetala</i>	Diamond petaled CA poppy	Mar-Jun	Fallow fields, open places; <1600 ft.		C2	1B 3-3-3
12. <i>Fritillaria agrestis</i>	Stink bells	Mar-Apr	Clay depressions, heavy, low soils; <1600 ft.		C2	4 1-1-3
13. <i>Fritillaria falcata</i>	Talus fritillary	Mar-Apr	Serpentine talus; 1000-3900 ft.		C2	1B 2-2-3
14. <i>Grindelia camporum</i> var. <i>parviflora</i>	Great Valley gumplant	May-Oct	Sandy, saline bottom lands, fields, roadsides; <5000 ft.			4 1-1-4
15. <i>Lotus rubriflorus</i>	Red-flowered bird's-foot trefoil	Apr-May	Oak woodland/ grassland; ca.600 ft.		C2	1B 3-3-3
16. <i>Phacelia phacelloides</i>	Mt. Diablo phacelia	Apr-May	Open, rocky slopes; 1600-3900 ft.		C2	1B 2-2-3

<sup>1</sup> CE = State endangered.

<sup>2</sup> FE = Federal endangered.

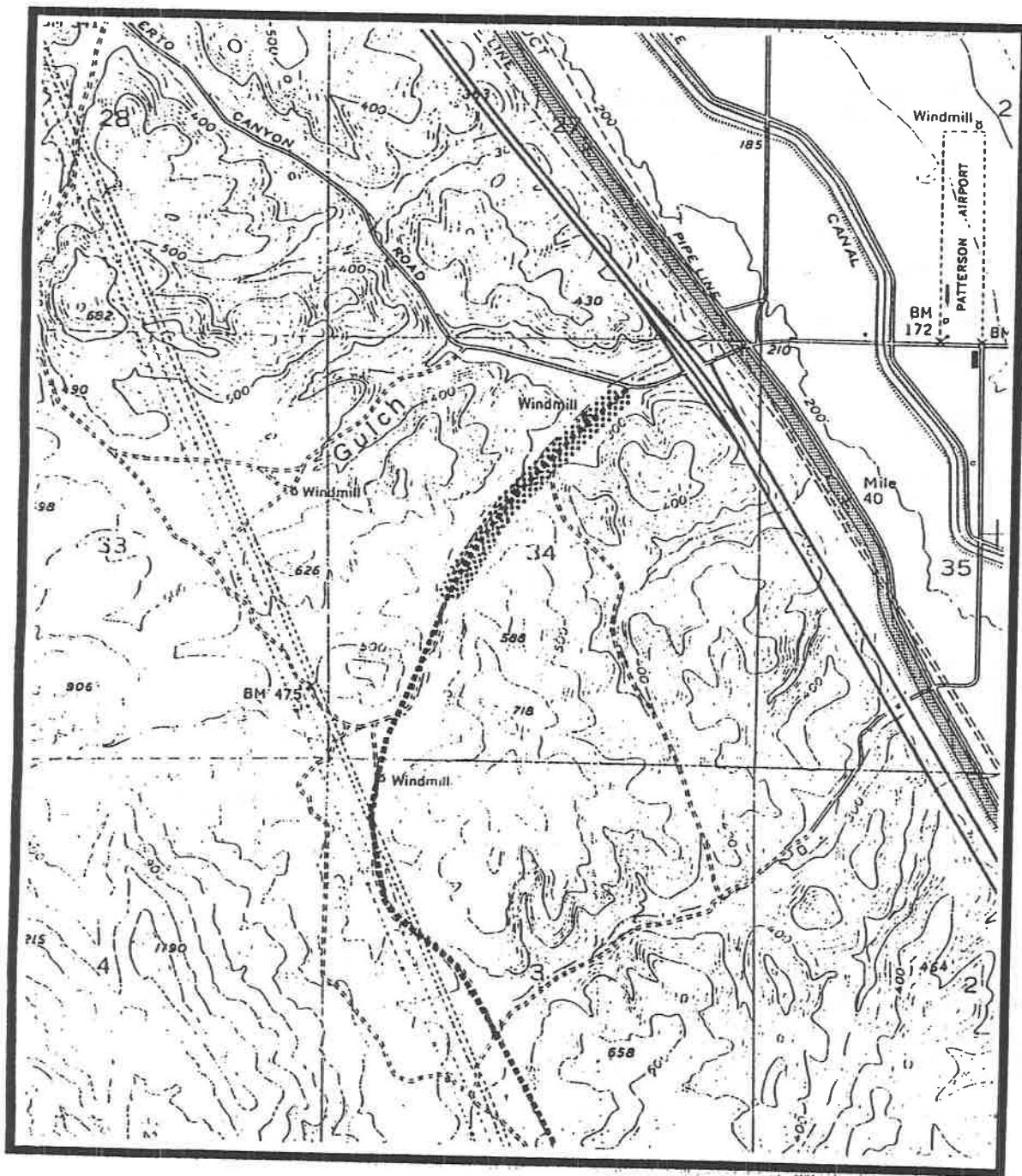
C1 = Enough data are on file to support listing.

C2 = Threat and/or distribution data are insufficient to support federal listing.

C3c = Too widespread and/or not threatened.

<sup>3</sup> The first letter in the column is the CNPS List; List 1B = Plants Rare, Threatened or Endangered in California and Elsewhere; List 3 = Plants about which more information is needed- A review list; List 4 = Plants of limited distribution - A watch list. The numbers that follow are the CNPS R-E-D Code (Rarity-Endangerment-Distribution) (see CNPS 1988).





Diablo Grande  
Phase I

Figure 3.

Sensitive Plant Survey  
April - May, 1993

Alkaline Soils in Vicinity of  
Proposed Access Road

----- Approximate Alignment of  
Access Road

Alkaline Soils (Approx. location)

Sycamore Environmental Consultants

Basemap: USGS Patterson Quad Map  
Scale: 1" = 24,000'

6. ***Cordylanthus palmatus*** (Palmate bird's beak). Palmate-bracted bird's beak is an annual species in the Scrophulariaceae family. It occurs in alkaline flats at less than 195 feet elevation, and is currently known only from Colusa, Yolo, Alameda, San Joaquin, Madera, and Fresno counties. The only potentially suitable habitat in the study area occurs along an alkaline drainage south of Del Puerto Road that parallels the new access road right-of-way (see Figure 3). However, no *Cordylanthus* species were observed here or elsewhere in the Phase 1 study area in surveys through May, 1993. As discussed below under Mitigation Measures, an additional survey for this species will be conducted in July 1993.
7. ***Coreopsis hamiltonii*** (Mt. Hamilton coreopsis). Mt. Hamilton coreopsis is an annual species in the Asteraceae family. It occurs on dry, exposed slopes at about 2,000 to 4,200 feet in the Diablo Range. Although dry, exposed slopes occur in the Phase 1 study area, this rare species typically occurs at elevations much higher than found in the study area. No species of *Coreopsis* were found during our studies.
8. ***Delphinium gypsophilum* ssp. *gypsophilum*** (Interior CA larkspur). Interior CA larkspur is a perennial species of the Ranunculaceae family. It occurs in grasslands and open woodlands. Two species of larkspur were found in the Phase 1 area, *Delphinium hesperium* ssp. *hesperium*, and *D. hesperium* ssp. *pallenscens*, neither of which are sensitive species.
9. ***Delphinium recurvatum*** (Recurved larkspur). Recurved larkspur is a perennial species of the Ranunculaceae family. It occurs in poorly drained, fine, alkaline soils in grassland, and in Atriplex scrub communities. The only potentially suitable habitat in the study area occurs along an alkaline drainage south of Del Puerto Road parallel to the proposed new access road right-of-way. However, surveys were conducted at the appropriate time of year and no larkspurs of any species were found in this alkaline area.
10. ***Eryngium spinosepalum*** (Spiny-sepaed button celery). Spiny-sepaed button celery is a biennial or perennial member of the Apiaceae family. It occurs in vernal pools and depressions chiefly on the east side of the Central Valley, and into the foothills of the Sierra Nevada. No *Eryngium* were found in the Phase 1 study area.
11. ***Eschscholzia rhombipetala*** (Diamond petaled CA poppy). Diamond petaled CA poppy is an annual member of the Papaveraceae family. It formally occurred in fallow fields and open places, and was last collected from Contra Costa County. It may be extinct. *Eschscholzia californica* occurs in the Phase 1 study area.
12. ***Fritillaria agrestis*** (Stink bells). Stink bells is a perennial member of the Liliaceae family. It is uncommon and occurs in clay depressions or other low, heavy soils. No species of *Fritillaria* were found in the Phase 1 study area, although habitat appears to be present in the form of heavy clay soils.
13. ***Fritillaria falcata*** (Talus fritillary). Talus fritillary is a perennial member of the Liliaceae family. It is rare and occurs in serpentine talus above 1,000 feet. Suitable habitat for this species was not found in the Phase 1 study area.
14. ***Grindelia camporum* var. *parviflora*** (Great Valley gumplant). *Grindelia* is a perennial member of the Asteraceae family. Munz (1959) did not recognize this variety as a distinct taxon and indicated it was a synonym for *G. procera* E. Greene. In the new Jepson Manual (Hickman, ed., 1993), Dr. Meredith Lane lumped (synonymized) *G. camporum* var. *parviflora* and *G. procera* with the common, widespread *G. camporum*.

var. *camporum*. Thus, as far as this taxon is concerned there appears to be no scientific basis for considering it as sensitive.

A odd specimen of *Grindelia* was collected along Oak Flat Road during the botanic survey. It was initially assumed to be the common *G. camporum*. However, it could not be identified by either the new Jepson Manual (Hickman, ed., 1993), Munz (1959), or Abrams (1960), since it possesses characters not described for any known species of *Grindelia*. However, because *Grindelia* is taxonomically complex with many named varieties and subspecies, and known to hybridize, it was not automatically assumed that the population was taxonomically distinct. Specimens of this collection were therefore sent to Dr. Meredith Lane, the current authority of this genus, at the University of Kansas. She determined that they are hybrids between *G. camporum* var. *camporum* and *G. hirsutula* var. *hirsutula* (pers. comm., 7 June 1993). There are a number of collections of this particular hybrid from eastern Santa Clara and Alameda counties, and western Stanislaus county.

15. ***Lotus rubriflorus*** (Red-flowered bird's-foot trefoil). Red-flowered bird's-foot trefoil is an annual member of the Fabaceae family. It occurs in oak woodlands and grasslands. Habitat appears to be present for this species in the Phase 1 area, and the elevation is also appropriate. However, this species was not observed during these studies.
16. ***Phacelia phacelloides*** (Mt. Diablo phacelia). Mt. Diablo phacelia is an annual member of the Hydrophyllaceae family. It occurs on open rocky slopes above 1,600 feet. Although appropriate habitat is not found in the Phase 1 study area, suitable habitat occurs in adjacent areas.

### Phase 1 Habitat

The dominant plant community throughout most of the study area consists of non-native grassland (Holland, 1986). An important aspect of this study was to locate specific microhabitats within the study area, because these special habitats have the highest potential for supporting populations of sensitive species. For example, heavy clay soil, rock outcrops, drainages, alkali areas, and riparian areas were surveyed.

The heavy clay soils provide habitat for several potential sensitive species. However, because the land has been intensively grazed for probably well over 100 years, most herbaceous native vegetation has been replaced by introduced grasses and herbaceous species, typical of similar areas in the Central Valley of California.

There are relatively few rocky outcrops in the Phase 1 area. All have been highly disturbed by cattle, and no sensitive plant species were found in these areas.

There are a number of intermittent drainages in the Phase 1 area. All of these have been greatly disturbed by cattle. Although most contain some wetland species, no sensitive plant species were found in these areas.

An alkaline area dominated by alkali grass (*Distichlis* sp.) occurs in and adjacent to an unnamed, intermittent drainage south of Del Puerto Road. This alkaline habitat is within the area of the new proposed access road right-of-way.

Riparian habitat in the Phase 1 area occurs along the intermittent Salado Creek. The most common tree species in this corridor is Blue oak (*Quercus douglasii*), with a few scattered Valley oaks and cottonwoods (*Populus fremontii*). This area has also been adversely affected by the presence of cattle. No sensitive plant species were found along this riparian corridor.

Virtually no oak regeneration is occurring beneath the Blue oaks in the Phase 1 study area, which is believed to be the result of intense grazing.

### Mitigation Measures

Surveys were conducted for all potential sensitive species occurring in the study area, however, none were found. Since no sensitive plant species were found, no mitigation measures are proposed.

Additional surveys are only needed for *Cordylanthus mollis* ssp. *hispidus*, and *Cordylanthus palmatus*. The only potentially suitable habitat in the study area for both of these species occurs along an alkaline drainage south of Del Puerto Road. This drainage parallels the new access road right-of-way. The approximate location is shown on Figure 3. Surveys should be performed in July but prior to construction of the access road. If either species is found, avoidance could readily be accomplished by shifting the road alignment several hundred feet to the east or west. If not found, then no mitigation is required.

## LITERATURE CITED

Abrams, LeRoy. 1923, 1944, 1951, 1960. Illustrated Flora of the Pacific States. Stanford University Press, Stanford, CA.

CNPS, 1988. California Native Plant Society. Inventory of rare and endangered vascular plants of California. Fourth Edition.

Hickman, J., ed. 1993. The Jepson manual: higher plants of California. University of California Press, Berkeley, CA.

Holland, Robert. 1986. Preliminary descriptions of the terrestrial natural communities of California. California Department of Fish and Game, Sacramento, CA.

Lane, Meredith. 1993. Personal Communication.

Munz, Philip. 1959. A California flora. University of California Press, Berkeley, CA.

Nelson, James R. Rare plant surveys: Techniques for impact assessment. Natural Areas Journal 5:18-30.

**APPENDIX B**  
**CUMULATIVE TRAFFIC CONDITIONS**

## CUMULATIVE TRAFFIC CONDITIONS

To develop cumulative traffic conditions, Dowling Associates reviewed the future traffic analysis conducted for two studies. These include: 1) the I-5 Strategic Plan Traffic Analysis and 2) the Lakeborough EIR.

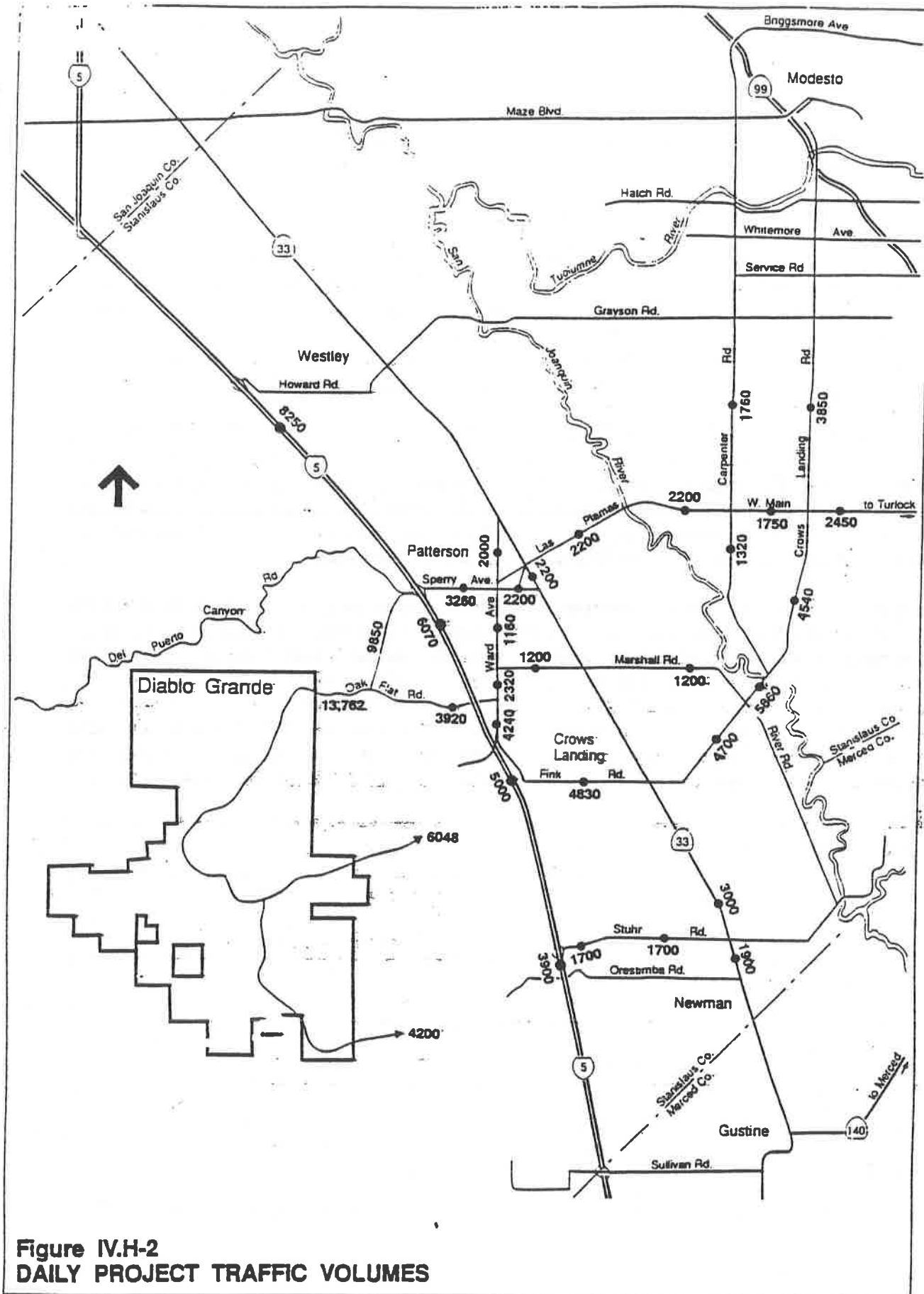
### I-5 Corridor Projections

Fehr and Peers Associates is conducting the I-5 Strategic Plan traffic analysis. This analysis is forecasting year 2020 traffic along the I-5 corridor. The traffic model developed for this analysis was calibrated primarily for the I-5 corridor; therefore, the accuracy of the forecasts on adjacent local streets is not clearly known. The study has however developed the most recent forecasts for the I-5 corridor. The Diablo Grande EIR traffic consultant contracted Fehr and Peers to secure 2020 traffic forecasts volumes for I-5 within Stanislaus County.

Two forecasts have been developed along I-5. Both forecasts are for the year 2020. The forecasts are called "Baseline" and "High Growth". The baseline forecast includes 346 dwelling units and 108 employees. The high growth plan includes 663 dwelling units and 141 employees. This compares to 10,000 dwelling units included in the May 1990 DEIR for the Lakeborough Project. For Diablo Grande, the baseline plan includes 16 dwelling units and 629 employees while the high growth plan include 5016 dwelling units and 2,575 employees.

To insure the most conservative assumptions for the cumulative analysis, the high growth traffic forecasts on I-5 within Stanislaus County were extracted from the Fehr and Peers data. No details concerning on-site versus off-site traffic generation were available from Fehr and Peers. (Such details could be developed using the I-5 travel model if resources were made available). However, to determine the year 2020 with and without the project, the high growth forecasts were reduced by the traffic volumes shown in the DEIR on Figure IV.H-2 (Daily Project Traffic Volumes). The following table details the cumulative traffic volumes. The basic Fehr and Peers projections were adjusted to reflect the level of Lakeborough EIR and Diablo Grande DEIR.

Diablo Grande Roadway Segment	Fehr and Peers Cumulative	Base Cumulative Without Lakeborough & Without Diablo Grande	Base Cumulative Plus Lakeborough	Cumulative plus Diablo Grande
North County Line to Sperry Road	95300	86513	94613	102863
Sperry Road to Fink Road	77300	70793	77393	83463
Fink Road to Stuhr Road	71140	65703	72303	77303
Stuhr Road to South County Line	69530	65292	70392	74292





## Other Local and Regional Highways and Roads

To develop appropriate traffic forecasts for the other local and regional highways and roads near the site, Dowling Associates reviewed the cumulative traffic analysis conducted for the Lakeborough development and City of Patterson General Plan. For the Lakeborough EIR, TJKM used the SAAG model, updated it for all of the projects not included in the 2010 land use, and refined the estimate of through traffic along the I-5 corridor. The Lakeborough EIR included the traffic generated by the following projects:

- 2010 build out of the County General Plan and its incorporated cities.
- Grayson Park
- Mapes Ranch
- Merced County projections for I-5.
- San Joaquin County projections for I-5.

To produce a more realistic forecast for off-site daily and peak hour traffic, Dowling Associates, with County approval, used the following process to estimate the cumulative traffic conditions.

- The 2010 daily and peak hour traffic forecasts provided in the Lakeborough EIR for the "with and without" Lakeborough project condition were used as the basic cumulative traffic projections for the study area streets.
- The growth in daily traffic projected for the build out of Patterson was added to the Lakeborough EIR projections to evaluate basic roadway travel lane requirements.
- The daily traffic from the Diablo Grande trip generation analysis was added to the above projections to produce the 2010 with project condition.
- For the peak hour analysis, the traffic projections from the Lakeborough EIR were supplemented with peak hour adjustments of the Patterson General Plan daily traffic projections. While no peak hour traffic assessment was included in the Patterson General Plan analysis, Dowling Associates applied a 10 percent peak hour and 67/33 and 33/67 percent directional split respectively to estimate the AM and PM peak hour traffic volumes for build out of the Patterson General Plan.
- Peak hour traffic volumes from the project were added to the above data to produce the existing plus project and cumulative plus project conditions. For the cumulative analysis, two options were considered: 1) a cumulative without Lakeborough; and 2) a cumulative with Lakeborough. For the first, the development of the Lakeborough project was added to the cumulative plus project conditions for full build out. For the second, the Lakeborough development was included in the cumulative and the Diablo Grande project added to estimate full build out.

Figure IV.H-3 illustrates the average daily traffic volumes assumed for the cumulative traffic conditions with Lakeborough but without Diablo Grande. Figure IV.H-4 illustrates the average daily traffic volumes assumed for the cumulative traffic conditions with Lakeborough and Diablo Grande.

## TRAFFIC IMPACTS

The traffic generated by the project was added to the surrounding street system to determine the off-site impacts. Two levels of impact were addressed. These include: 1) changes in average daily traffic volumes and the resultant levels of service produced; and 2) intersection levels of service at selected intersections near the site.

### Daily Traffic Impacts

The DEIR provided a set of average daily traffic capacities for various freeway configurations. Caltrans and the County staff reviewed these capacities and suggested alternatives. The County and Caltrans did not suggest the same values. Table 3-1 of the Highway Capacity Manual, Special Report #209 suggests for 6 lane freeways with design speeds of 70 mph operating at level of service "C" the average daily capacity of this configuration is 93,000 vehicles (1,500 vph times 6 lanes times a 10% peak hour factor). Using this value all portions of I-5 within Stanislaus County would operate at or better than level of service "C" except north of Sperry Road which would operate at level of service "D" due to a projected volume of 95,985 or about 3,000 vehicles per day above level of service "C" capacity threshold. Based upon the Highway Capacity Manual an eight (8) lane freeway will have a capacity of 124,000 vehicles per day. Stanislaus County staff also reviewed the freeway capacity assumptions. They suggested a capacity of 87,000 vehicles per day for a six (6) lane freeway. For this analysis, the 93,000 vehicles per day for a six lane freeway and 124,000 vehicles per day for an eight lane freeway were used.

The table reflects the roadway requirements for level of service "C". The rural highway criteria were generally applied to the existing plus project condition along Ward Avenue, Fink Road, Crows Landing Road, Carpenter, Stuhr Road, and Highway 33.

The Lakeborough EIR suggests that a portion of the cumulative traffic would include trips generated by Lakeborough. Therefore, some of the roadways show no increase in traffic between the "with and without" Lakeborough development conditions. For the Diablo Grande project, the total increment of project traffic is added to produce a worse case projection. It should be noted, however that a portion of the cumulative traffic growth in Patterson and within the I-5 corridor would be associated with the development of Diablo Grande. Therefore, the traffic projections for the project-plus-cumulative conditions could be overstated.

*Existing Plus Total Project.* As Table IV.H-D indicates, the following improvements would be needed to improve existing traffic conditions to acceptable levels of service:

- *Crows Landing Road* - Crows Landing Road is currently a two lane rural roadway. The sections of Crows Landing Road from West Main Street to north of Grayson Road is currently operating at unacceptable levels of service, and would need to be widened to four lanes to improve levels of service.



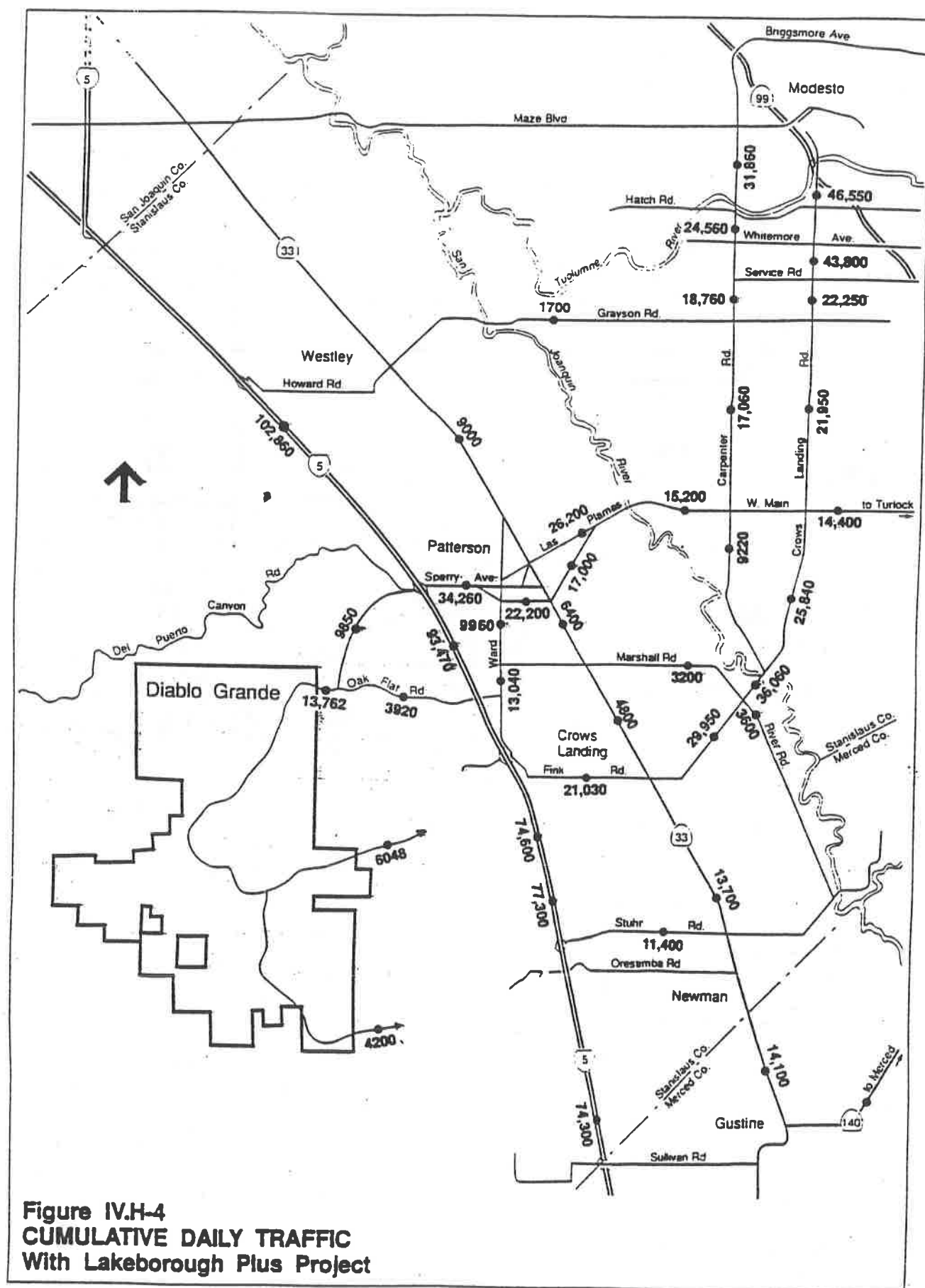


Table IV.H-C summarizes the capacities at level of service "C", "D" and "E" for freeways, expressways and City streets. Table IV.H-D summarizes the average daily traffic volumes for various roadway segments affected by the project. This table summarizes six development scenarios:

1. Existing Conditions
2. Existing Plus Project
3. Cumulative without Lakeborough (and without Project)
4. Cumulative plus project without Lakeborough
5. Cumulative with Lakeborough (and without Project)
6. Cumulative with Lakeborough with Project.

**Table IV.H-C - Daily Roadway Capacities by Level of Service**

Roadway Type	Peak Hour Level of Service		
	"C"	"D"	"E"
City and Rural Street			
Two-lane	12,000	13,000	15,000
Four-lane	24,000	27,000	30,000
Six-lane	36,000	40,000	45,000
Expressways			
Two-lane	16,000	18,000	20,000
Four-lane	32,000	36,000	40,000
Six-lane	48,000	54,000	60,000
Freeways			
Two-lane	31,000	37,000	40,000
Four-lane	62,000	74,000	80,000
Six-lane	93,000	111,000	120,000
Eight -lane	124,000	148,000	160,000
Rural Highways <sup>1</sup>			
Two-lane	7,000	11,500	

1 = This standard was applied, at the request of Stanislaus County, to Ward Avenue, Fink Road, Crows Landing Road, Carpenter Road, Stuhr Road, and Highway 33.

**Table IV.H-D - Forecast Daily Traffic Volumes**

<b>Development Scenarios</b>	<b>Average Daily Traffic</b>	<b>Required Number of Travel Lanes</b>
<b>I-5 North of Sperry Road</b>		
Existing	21,200	2
Existing Plus Project	29,450	2
Cumulative No Lakeborough No Project	86,510	6
Cumulative No Lakeborough With Project	94,760	8
Cumulative With Lakeborough No Project	94,610	8
Cumulative With Lakeborough With Project	102,860	8
<b>I-5 North of Stuhr Road</b>		
Existing	21,200	2
Existing Plus Project	26,200	2
Cumulative No Lakeborough No Project	65,300	6
Cumulative No Lakeborough With Project	69,200	6
Cumulative With Lakeborough No Project	70,400	6
Cumulative With Lakeborough With Project	74,300	6
<b>Sperry Road East of I-5</b>		
Existing	2,800	2
Existing Plus Project	6,040	2
Cumulative No Lakeborough No Project	31,000	6
Cumulative No Lakeborough With Project	34,260	6
Cumulative With Lakeborough No Project	31,000	6
Cumulative With Lakeborough With Project	34,260	6
<b>Las Plamas Road East of Highway 33</b>		
Existing	7,550	2
Existing Plus Project	9,750	2
Cumulative No Lakeborough No Project	24,000	4
Cumulative No Lakeborough With Project	26,200	4
Cumulative With Lakeborough No Project	24,000	4
Cumulative With Lakeborough With Project	26,200	4

Table IV.H-D - Forecast Daily Traffic Volumes (Continued)

Development Scenarios	Average Daily Traffic	Required Number of Travel Lanes	
Ward Avenue South of Sperry Road			
Existing	650	2	
Eisting Plus Project	1,810	2	
Cumulative No Lakeborough No Project	2,700	2	
Cumulative No Lakeborough With Project	3,860	2	
Cumulative With Lakeborough No Project	8,800	2	
Cumulative With Lakeborough With Project	9,960		4
Ward Avenue South of Oak Flat Road			
Existing	390	2	
Existing Plus Project	4,630	2	
Cumulative No Lakeborough No Project	2,700	2	
Cumulative No Lakeborough With Project	7,240	4	
Cumulative With Lakeborough No Project	8,800	4	
Cumulative With Lakeborough With Project	13,040		4
Marshall Road East of Ward Avenue			
Existing	200	2	
Existing Plus Project	1,400	2	
Cumulative No Lakeborough No Project	2,000	2	
Cumulative No Lakeborough With Project	3,200	2	
Cumulative With Lakeborough No Project	2,000	2	
Cumulative With Lakeborough With Project	3,200		2
Fink Road East of Ward Avenue			
Existing	1,440	2	
Existing Plus Project	6,270	2	
Cumulative No Lakeborough No Project	4,750	2	
Cumulative No Lakeborough With Project	9,580	2	
Cumulative With Lakeborough No Project	16,200	4	
Cumulative With Lakeborough With Project	21,030		4

Table IV.H-D - Forecast Daily Traffic Volumes (Continued)

Development Scenarios	Average Daily Traffic	Required Number of Travel Lanes
<b>Stuhr Road East of I-5</b>		
Existing	870	2
Existing Plus Project	2,570	2
Cumulative No Lakeborough No Project	2,700	2
Cumulative No Lakeborough With Project	4,400	2
Cumulative With Lakeborough No Project	9,700	2
Cumulative With Lakeborough With Project	11,400	2
<b>West Main West of Carpenter</b>		
Existing	5,820	2
Existing Plus Project	8,020	2
Cumulative No Lakeborough No Project	13,000	4
Cumulative No Lakeborough With Project	15,200	4
Cumulative With Lakeborough No Project	13,000	4
Cumulative With Lakeborough With Project	15,200	4
<b>Crows Landing Road East of Highway 33</b>		
Existing	6,200	2
Existing Plus Project	10,900	2
Cumulative No Lakeborough No Project	13,750	4
Cumulative No Lakeborough With Project	18,450	4
Cumulative With Lakeborough No Project	25,250	6
Cumulative With Lakeborough With Project	29,950	6
<b>Highway 33 South of Crows Landing Road</b>		
Existing	7,100	2
Existing Plus Project	10,100	2
Cumulative No Lakeborough No Project	10,700	2
Cumulative No Lakeborough With Project	13,700	2
Cumulative With Lakeborough No Project	10,700	2
Cumulative With Lakeborough With Project	13,700	2



**Table IV.H-D - Forecast Daily Traffic Volumes (Continued)**

<b>Development Scenarios</b>	<b>Average Daily Traffic</b>	<b>Required Number of Travel Lanes</b>
<b>Highway 33 South of Newman</b>		
Existing	7,100	2
Existing Plus Project	7,100	2
Cumulative No Lakeborough No Project	10,600	2
Cumulative No Lakeborough With Project	10,600	2
Cumulative With Lakeborough No Project	14,000	2
Cumulative With Lakeborough With Project	14,100	2
<b>Crows Landing Road North of Marshall Road</b>		
Existing	5,650	2
Existing Plus Project	11,510	2
Cumulative No Lakeborough No Project	18,700	4
Cumulative No Lakeborough With Project	24,560	4
Cumulative With Lakeborough No Project	30,200	6
Cumulative With Lakeborough With Project	36,060	6
<b>Crows Landing Road North of West Main</b>		
Existing	7,600	2
Existing Plus Project	11,450	2
Cumulative No Lakeborough No Project	11,800	2
Cumulative No Lakeborough With Project	15,650	4
Cumulative With Lakeborough No Project	18,100	4
Cumulative With Lakeborough With Project	21,950	4
<b>Crows Landing Road North of Grayson Road</b>		
Existing	8,750	2
Existing Plus Project	12,600	2
Cumulative No Lakeborough No Project	12,400	2
Cumulative No Lakeborough With Project	16,250	4
Cumulative With Lakeborough No Project	18,500	4
Cumulative With Lakeborough With Project	22,250	4

Table IV.H-D - Forecast Daily Traffic Volumes (Continued)

Development Scenarios	Average Daily Traffic	Required Number of Travel Lanes
<b>Carpenter Road North of Crows Landing Road</b>		
Existing	3,140	2
Existing Plus Project	4,460	2
Cumulative No Lakeborough No Project	5,800	2
Cumulative No Lakeborough With Project	7,120	2
Cumulative With Lakeborough No Project	7,900	2
Cumulative With Lakeborough With Project	9,220	2
<b>Carpenter Road North of West Main</b>		
Existing	4,100	2
Existing Plus Project	5,860	2
Cumulative No Lakeborough No Project	13,200	4
Cumulative No Lakeborough With Project	14,950	4
Cumulative With Lakeborough No Project	15,300	4
Cumulative With Lakeborough With Project	17,060	4
<b>Carpenter Road North of Grayson Road</b>		
Existing	5,600	2
Existing Plus Project	7,360	2
Cumulative No Lakeborough No Project	13,500	4
Cumulative No Lakeborough With Project	15,260	4
Cumulative With Lakeborough No Project	17,000	4
Cumulative With Lakeborough With Project	18,760	4

With the addition of project traffic, acceptable levels of service for all off-site roadways can be maintained without major street widening, except for the following:

- *Crows Landing Road* - Crows Landing Road is currently a two lane rural roadway. The sections of Crows Landing Road from West main Street to north of Grayson Road is currently operating at unacceptable levels of service, and would need to be widened to four lanes to improve levels of service. Addition of project traffic to Crows Landing Road would result in unacceptable levels of service from Highway 33 to north of Grayson Road. Improvement to acceptable levels of service would require widening of the entire length of Crows Landing Road from Highway 33 to north of Grayson Road to four lanes.
- *Highway 33* - Highway 33 in the vicinity of the project site is currently a two lane roadway. Existing volumes between Crows Landing Road and Newman are at the upper threshold of acceptability. The addition of project traffic would result in unacceptable levels of service along the section of Highway 33 between Crows Landing Road and Stuhr Road. Improvement to acceptable levels of service would require widening of this section of Highway 33 to four lanes.
- *Carpenter Road* - Carpenter Road is currently a two lane roadway. Addition of project traffic would result in unacceptable levels of service along the section of Carpenter Road north of Grayson Road. Improvement to acceptable levels of service would require widening of this section of Carpenter Road to four lanes.

*Cumulative Without Lakeborough Plus Total Project.* Analysis of cumulative conditions without development of the Lakeborough project indicates that a number of roadways will operate at unacceptable levels of service prior to the addition of Diablo Grande traffic. These roadways and the improvements which would be needed to improve operations to acceptable levels of service are:

- *Sperry Road* - Sperry Road east of I-5 would need to be widened to six lanes.
- *Las Palmas Road* - Las Palmas Road east of Highway 33 would need to be widened to four lanes.
- *West Main Street* - West Main Street west of Carpenter Road would need to be widened to four lanes.
- *Crows Landing Road* - Crows Landing Road from highway 33 to north of Grayson Road would need to be widened to four lanes.
- *Highway 33* - Highway 33 from Crows Landing road to Newman would need to be widened to four lanes.
- *Carpenter road* - Carpenter Road north of West Main Street would need to be widened to four lanes.

With the addition of project traffic to cumulative conditions, unacceptable levels of service would occur along the following roadways:

- I-5 - I-5 in the vicinity of the project site is currently a four lane facility. Under cumulative conditions (without Lakeborough), eight would be adequate to accommodate projected traffic levels. Traffic generated by the proposed project would result in unacceptable levels of service under existing geometrics. To improve operations to acceptable levels of service, the freeway would need to be widened from four to six lanes. While it is possible that a portion of the cumulative traffic would include traffic from Diablo Grande, the project traffic was added to the projected cumulative traffic to produce a worse case scenario.
- Ward Avenue - Ward Avenue is currently a two lane roadway. Under cumulative conditions (without Lakeborough), two lanes would continue to be adequate to accommodate forecasted traffic volumes. Addition of traffic generated by the proposed project would result in unacceptable levels of service along Ward Avenue south of Oak flat Road. Improvement of operations to acceptable levels of service would require widening of this section of Ward Avenue to four lanes.
- Fink Road - Fink Road is currently a two lane roadway. Under cumulative conditions (without Lakeborough), two lanes would continue to be adequate to accommodate forecasted traffic volumes. Addition of traffic generated by the proposed project would result in unacceptable levels of service along Fink Road east of Ward Avenue. Improvement of operations to acceptable levels of service would require widening of this section of Ward Avenue to four lanes.
- Carpenter Road - Carpenter Road between West Main Street and Crows Landing Road is currently a two lane roadway. Under cumulative conditions (without Lakeborough), two lanes would continue to be adequate to accommodate forecasted traffic volumes. Addition of traffic generated by the proposed project would result in unacceptable levels of service along this section of Carpenter road. Improvement of operations to acceptable levels of service would require widening of Carpenter Road between West Main Street and Crows Landing Road to four lanes.

Acceptable levels of service for the remaining roadways can be maintained with the number of lanes required for the cumulative condition without project condition. The project does not produce a demand for more travel lanes.

*Cumulative With Lakeborough Plus Total Project.* Analysis of cumulative conditions with development of the Lakeborough project indicates that a number of roadways will operate at unacceptable levels of service prior to the addition of Diablo Grande traffic. These roadways and the improvements which would be needed to improve operations to acceptable levels of service are:

- I-5 - I-5 in the vicinity of the project site would need to be widened to eight lanes.
- Sperry Road - Sperry Road east of I-5 would need to be widened to six lanes.

- Las Palmas Road - Las Palmas Road east of Highway 33 would need to be widened to four lanes.
- Ward Avenue - Ward Avenue between Sperry road and fink road would need to be widened to four lanes.
- Fink Road - Fink Road east of Ward Avenue would need to be widened to four lanes.
- Stuhr Road - Stuhr Road east of I-5 would need to be widened to four lanes.
- West Main Street - West Main Street west of Carpenter road would need to be widened to four lanes.
- Crows Landing Road - Crows Landing Road from Highway 33 to West Main Street would need to be widened to six lanes. Crows Landing Road from West Main Street to north of Grayson Road would need to be widened to four lanes.
- Highway 33 - Highway 33 from crows Landing Road to Newman would need to be widened to four lanes.
- Carpenter Road - Carpenter Road north of West Main Street would need to be widened to four lanes.

With the addition of project traffic, acceptable levels of service for all roadways in the vicinity of the project site can be maintained with the number of lanes required for the cumulative condition without project condition. The project does not produce a demand for more travel lanes.

## **Project Contribution to I-5 Corridor Improvements**

Stanislaus County Department of Public Works staff has established the cost for new freeway construction at \$750,000 per lane/mile. The following table details the cost contributions for both Lakeborough and Diablo Grande for the portions of I-5 within Stanislaus County. The cost allocation was applied to the percentage of reserved capacity after the widening that is used by each of the two proposed projects.

The following table summarizes the recommended costs contributions to the Stanislaus County portions of I-5. It should be noted that Fehr and Peers has provided forecasts for other segments of I-5. Therefore, if the 8,250 trips from the north and 3,900 trips from the south associated with the Diablo Grande project can be reasonably assigned to the freeway system segments outside of Stanislaus County, similar cost allocations can be made .

The table suggests that of the \$60,000,000 in freeway widening costs, \$4,534,300 should be assigned to Diablo Grande. The Fehr and Peers forecasts also suggest that the portion of I-5 north of Sperry Road will exceed level of service "C" even if a 6 lane facility is constructed. Therefore, an eight (8) lane freeway was assumed for this segment of I-5. If level of service "D" is found acceptable on this segment, the cost contributions noted in the table would be reduced.

Diablo Grande Roadway Segment	Length Miles	Existing # Lanes	Existing VPD	LOS "C" Capacity 8 or 6 Lanes	Reserved Capacity
North County Line to Sperry Road	12	4	21,200	124,000	102,800
Sperry Road to Fink Road	5	4	21,200	93,000	71,800
Fink Road to Stuhr Road	5	4	21,200	93,000	71,800
Stuhr Road to South County Line	6	4	21,200	93,000	71,800
Roadway Segment	I-5 Trips D. Grande	I-5 Trips L. Borough	Cumulative VPD	Reserved Capacity	
North County Line to Sperry Road	8,250	8,100	102863	102800	
Sperry Road to Fink Road	6,070	6,600	83463	71800	
Fink Road to Stuhr Road	5,000	6,600	77303	71800	
Stuhr Road to South County Line	3,900	5,100	74292	71800	
Roadway Segment	% Reserved Capacity D. Grande	% Reserved Capacity L. Borough	Widening Cost	Responsibility D. Grande	Responsibility L. Borough
North County Line to Sperry Road	8.03%	7.88%	\$36,000,000	\$2,889,105	\$2,836,576
Sperry Road to Fink Road	8.45%	9.19%	\$7,500,000	\$634,053	\$689,415
Fink Road to Stuhr Road	6.96%	9.19%	\$7,500,000	\$522,284	\$689,415
Stuhr Road to South County Line	5.43%	7.10%	\$9,000,000	\$488,858	\$639,276
			\$60,000,000	\$4,534,300	\$4,854,682

**APPENDIX C**  
**1990 KIT FOX SURVEY**



**SAN JOAQUIN KIT FOX ASSESSMENT  
DIABLO GRANDE PHASE 1 SITE AND  
THE OAK FLAT ROAD ALIGNMENT  
STANISLAUS COUNTY, CALIFORNIA**

***February 21, 1991***

***Prepared for:***

***Diablo Grande  
6060 Golf Course Dr.  
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## SUMMARY

Standard survey methodologies, including scent stations, spot-lighting, and ground transect surveys were used to detect evidence of San Joaquin kit fox activity in the Phase 1 portion of the Diablo Grande project site, including Oak Flat Valley and the Oak Flat Road alignment. Surveys conducted in February, July, and August 1990, resulted in finding no direct, positive evidence of current kit fox activity occurring in the project site. The surveys revealed the presence of many other wildlife species. Oak Flat Valley and the eastern portion of the Oak Flat Road alignment contain suitable habitat for the kit fox. Large numbers of California ground squirrels, an important prey item for kit foxes, occur throughout the project site.

The eastern end of the Oak Flat Road corridor is in known kit fox habitat and kit fox have been reported from the vicinity of the east end of the corridor. We did not find any evidence of their use but suitable habitat and potential dens are present and it is likely that kit fox use this area.

Oak Flat Valley is suitable habitat and sufficient prey and potential dens are available for kit fox. However, Oak Flat Valley is separated from the Central Valley floor and its margins with known kit fox use by steep hills with rocky, shallow soils and oak woodland habitat which are unsuitable habitats for kit fox. There is potential for a wandering kit fox to find and stay in Oak Flat Valley. However, the limited amount of foraging habitat and its isolation would likely preclude regular, long-term use by kit fox.

## INTRODUCTION

### PURPOSE OF STUDY

LSA Associates, Inc. (LSA), prepared this report to present the results of our biological survey of the Diablo Grande Phase 1 project site. The survey assessed whether the project site is used by the San Joaquin kit fox (*Vulpes macrotis mutica*).

### PROJECT DESCRIPTION

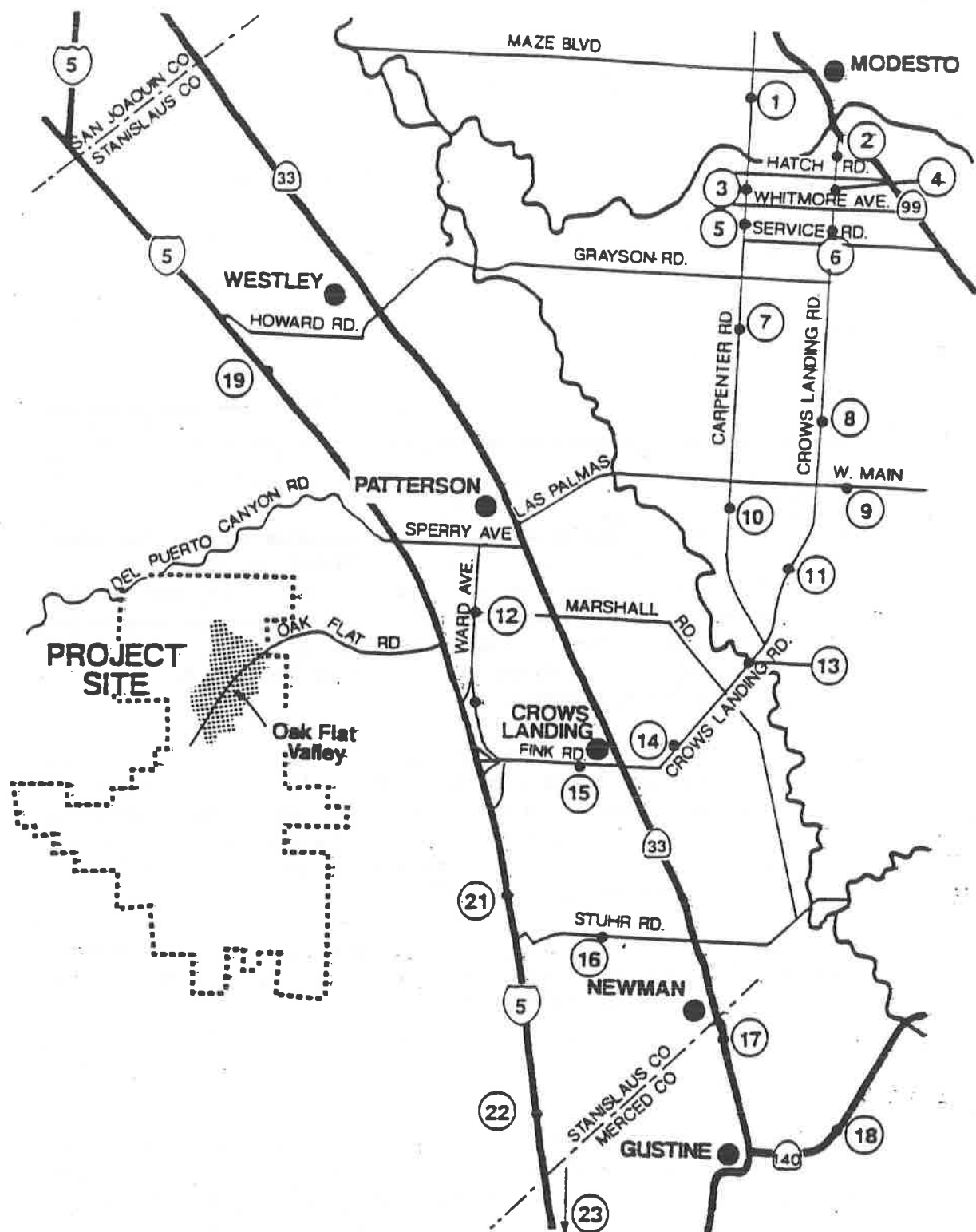
The Diablo Grande project site is situated near the western edge of the San Joaquin Valley, in the eastern foothills of the Coast Range, south of Del Puerto Canyon and approximately 4 to 12 miles southwest of Patterson, along the Salado Creek drainage (Figure 1). The study area includes two sites:

- **Oak Flat Valley** is at the western terminus of Oak Flat Road, approximately 10 miles southwest of Patterson and eight miles west of Interstate Highway 5 (I-5). The Oak Flat Valley site includes approximately 1800 acres located in the more level portions of the valley and includes portions of Sections 13, 18, 19, 24, and 25 of Township 6 south, Range 6 and 7 east of the U.S.G.S. 7½ minute Copper Mountain quadrangle.
- **Oak Flat Road Alignment** includes Oak Flat Road from I-5 to the northern end of Oak Flat Valley (Figure 1). The Oak Flat Road alignment is 200 feet in width and includes approximately 100 acres along the existing Oak Flat Road, in portions of Sections 7, 8, 9, 10, 11, 12, 13, 14, and 18 of Township 6 south, Range 7 east, of the U.S.G.S. 7½ minute Patterson quadrangle.

The plans for the Diablo Grande Phase 1 project includes low and medium density residential and commercial development in Oak Flat Valley and the widening of the existing Oak Flat Road access.

### ENVIRONMENTAL SETTING

The study area is predominantly rural. Two residential units and associated barns occur in Oak Flat Valley, and a cherry orchard has been established approximately 1¼ miles west of I-5. Lands within the vicinity of the project site are used primarily for cattle ranching and have been heavily grazed.



02-14-90 (DIG001)

**Figure 1**  
**Location of Project Site**

**LSA**

Scale in feet  
0 2 4

## Topography and Soils

Elevations in Oak Flat Valley ranges from 900 to 1,300 feet. The valley consists of low, rolling hills, surrounded by moderate to steep hills. The Oak Flat Road alignment extends for approximately 8 miles from I-5 to Oak Flat Valley. Elevations along the road alignment range from 250 feet near I-5 to 1,000 feet near Oak Flat Valley. Along the road alignment, the topography ranges from nearly flat between the base of the foothills and I-5 to hills with slopes up to 100 percent in the narrow Salado Creek Canyon in the western portion of the road alignment.

Most of the soil types west of I-5 in Stanislaus County have not been mapped. Soils south of Oak Flat Road from the mouth of Salado Creek Canyon to I-5 were mapped and are predominantly clay loam and clay soils of the Vernales, Stomar, Positas, Zacharias clay and clay loam soils, and the Salado fine sandy loam soils series (McLaughlin et al. 1968). The soils in Oak Flat Valley and surrounding hills are shallow to moderately shallow soils overlaying sand and siltstones and cobble conglomerate of the Panoche Formation (Bishop 1970).

## Plant Communities

Vegetation on the project site falls into several types, as characterized by Holland (1986).

### Oak Flat Valley

Vegetation within Oak Flat Valley is dominated by introduced non-native grassland and blue oak (*Quercus douglasii*) savanna. Blue oak woodland occurs on some of the north and east facing slopes, in canyons, and along drainages. Within the blue oak savanna and woodland, understory vegetation is dominated by non-native grassland. The grassland is very heavily grazed and 30 to 70 percent of the grassland is bare of vegetation. The dominant plant species within the grassland is storksbill (*Erodium* sp.).

Water occurs in portions of Salado Creek most of the year. Vegetation occurring in and adjacent to much of Salado Creek include introduced annual grasses. Portions of the creek have stands of rush (*Juncus* sp.), flat-sedge (*Cyperus* sp.), and bulrush (*Scirpus* sp.).

Nine stock ponds occur in Oak Flat Valley. Two contained water at the time of the surveys, including one adjacent to the new ranch house and the second within Salado Creek at the northeast edge of the valley, along Oak Flat Road. Vegetation in the ranch pond include a few clumps of cattails (*Typha* sp.). Vegetation in the Salado Creek pond include a few willows (*Salix* sp.) and clumps of cattails along the edge of the pond.

### ***Oak Flat Road Alignment***

Vegetation along the eastern half of Oak Flat Road alignment is dominated by introduced annual grassland. Near the base of the foothills west of I-5 is a newly planted cherry orchard. The western half of the road alignment occurs in the Salado Creek canyon, and is characterized by steep north and south facing slopes with numerous rock outcrops. The south facing slopes are dominated by a mixture of introduced annual grassland and Diablan sage scrub, dominated by black sage (*Salvia mellifera*). The north facing slopes are dominated by a mixture of introduced annual grassland and blue oak woodland. Water occurs in this portion of Salado Creek most of the year. Riparian vegetation along Salado Creek includes cattails in some of the larger permanent pools and scattered willows. Alkali deposits occur in several locations along Salado Creek. Small stands of native bunchgrass grassland occur along the Salado Creek in both the valley and road alignment in areas inaccessible to cattle grazing.

### ***REGULATORY CONTEXT***

The San Joaquin kit fox is legally protected as a California threatened species and as a federally endangered species under the state and federal endangered species acts, respectively. See Appendix A for a detailed description of natural history of the San Joaquin subspecies of the kit fox in the northern part of its range.

### ***U.S. Fish and Wildlife Service***

The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over formally listed threatened and endangered species under the federal Endangered Species Act. The act protects listed species from harm or "take," which is broadly defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." An activity is defined as "take" even if it is unintentional or accidental.

Violation of the Endangered Species Act places the individual or company in jeopardy for both civil and criminal penalties, which may include fines and imprisonment. An "incidental take" permit may be issued by the USFWS allowing take under certain circumstances. For projects with a federal role an incidental take can occur under Section 7 of the Endangered Species Act.

For projects without a federal role and on land that is not administered by the federal government, an incidental take permit may be issued under Section 10 of the Endangered Species Act upon approval of a Habitat Conservation Plan. The Habitat Conservation Plan examines in detail the biology and distribution of federally listed and candidate species and methods to conserve the species while allowing development.

An "incidental take" permit is not required of projects that avoid take of endangered or threatened species. To qualify, the project must include measures to avoid, reduce, or offset adverse effects to target species during construction and subsequent operation. In order to ensure that this will be the case, the project sponsor may submit a request for a technical review of the project to the USFWS prior to initiation of construction as part of an informal consultation process.

### ***California Department of Fish and Game***

The California Department of Fish and Game (CDFG) has jurisdiction over state-listed threatened and endangered species. The state and federal lists are generally similar, although a few species present on one list may be absent on the other and vice versa. CDFG's jurisdiction requirements are essentially similar to those of the USFWS.

## STUDY METHODS

### PRE-FIELD INVESTIGATIONS

Prior to conducting the field survey of the project site, we consulted with biologists at the CDFG (Ron Schlorff pers. comm.), USFWS (Laurie Simons pers. comm., and Wayne White, consultation letter attached), and the California Natural Diversity Data Base (CNDDDB 1989) to determine the potential for the presence of rare and endangered species on the project site.

### FIELD SURVEY

A combination of three survey techniques were used to investigate the potential presence of San Joaquin kit foxes in the project site, following the San Joaquin kit fox survey methodology recommended by CDFG Region 4 (CDFG 1990): (1) scent stations, (2) spotlighting surveys, and (3) ground transects. Field work in the project site was conducted in February, July, and August 1990. The February survey included ground transects and spot-lighting surveys as part of a general biological reconnaissance of the Phase 1 portion of the project site. The July and August surveys were conducted in compliance with DFG Region 4 criteria for kit fox surveys. All surveys included a total of 36 person-days.

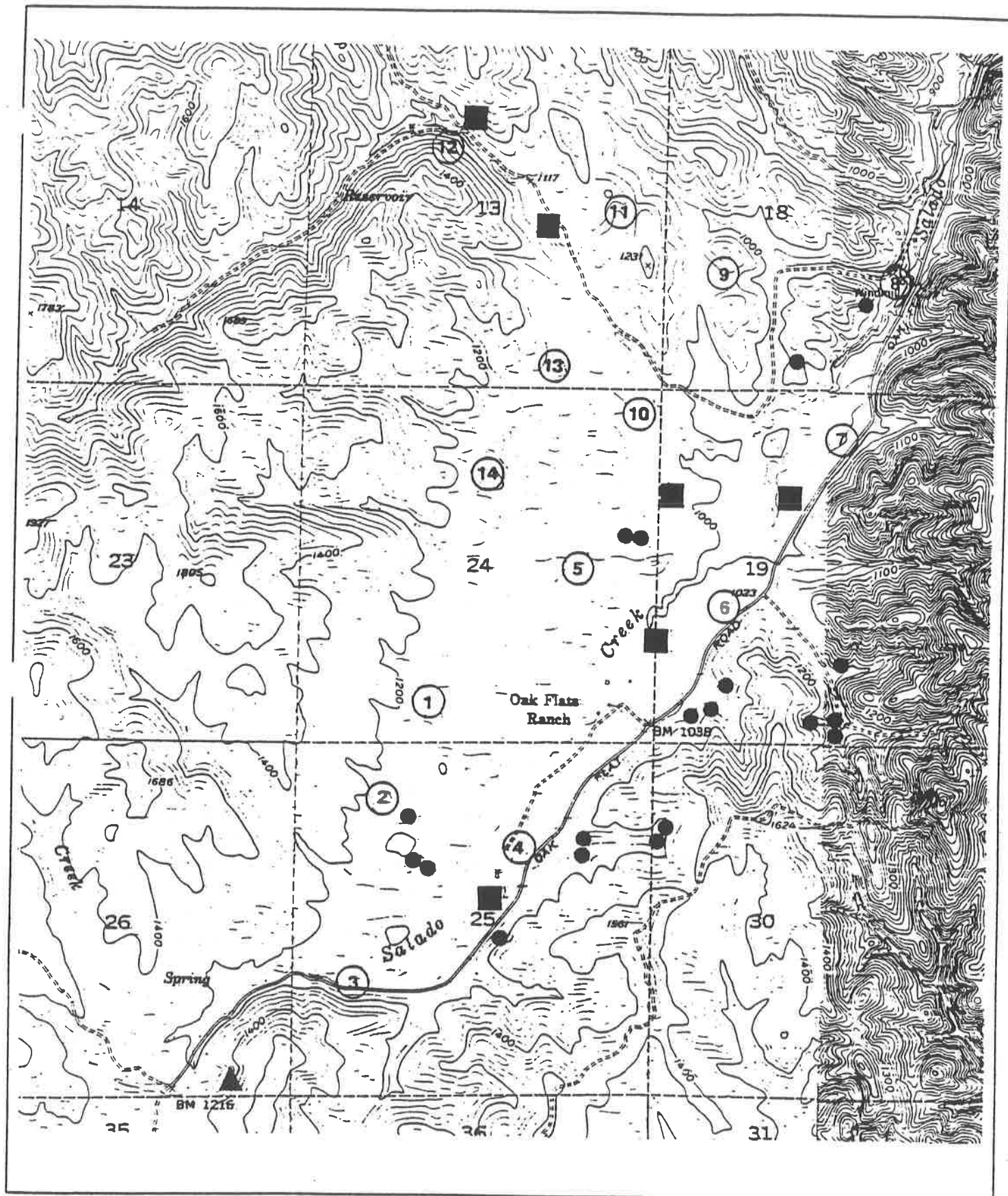
#### *Scent Stations*

Scent stations were set according to established California Department of Fish and Game guidelines (CDFG 1990). Each scent station consisted of a circle of cleared ground, approximately 1 meter in diameter, covered with approximately one-half inch of diatomaceous earth, and smoothed by putting down a sheet of plastic and sweeping with a broom. Stations were baited with chicken or beef based canned cat food, which were placed at the center of each circle to attract mammalian predators. Stations were re-baited and brushed smooth each afternoon and checked the following morning for tracks. Track identifications were verified by reference to standard field guides (Murie 1974, Halfpenny 1986).

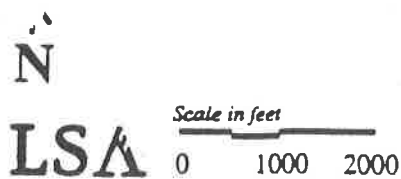
#### *Oak Flat Valley*

Fourteen scent stations were located in Oak Flat Valley (Figure 2). Four scent stations were established on July 23, 1990 and 10 on July 24, 1990. Scent stations 1-4 were checked on 7 days, from July 24-27 and July 31-August 2, 1990; and stations 5-14 were checked on 6 days, from July 25-27 and July 31-August 2, 1990, for a total of 88 scent station-nights.





02-14-90 (DIG001)



- ① Scent station location
- ▲ Prairie Falcon nest
- Badger sighting
- Potential San Joaquin Kit Fox den

**Figure 2**  
**Location of Scent Station,**  
**Potential Kit Fox Dens, and**  
**Special Interest Wildlife**  
**Observed**

### ***Oak Flat Road***

Twenty scent stations were located along the Oak Flat Road alignment (Figure 3). All 20 scent stations were established on August 9, 1990 and were checked on 6 days, on August 10 and from August 13-17, 1990, for a total 120 scent station-nights.

### ***Spot-lighting Surveys***

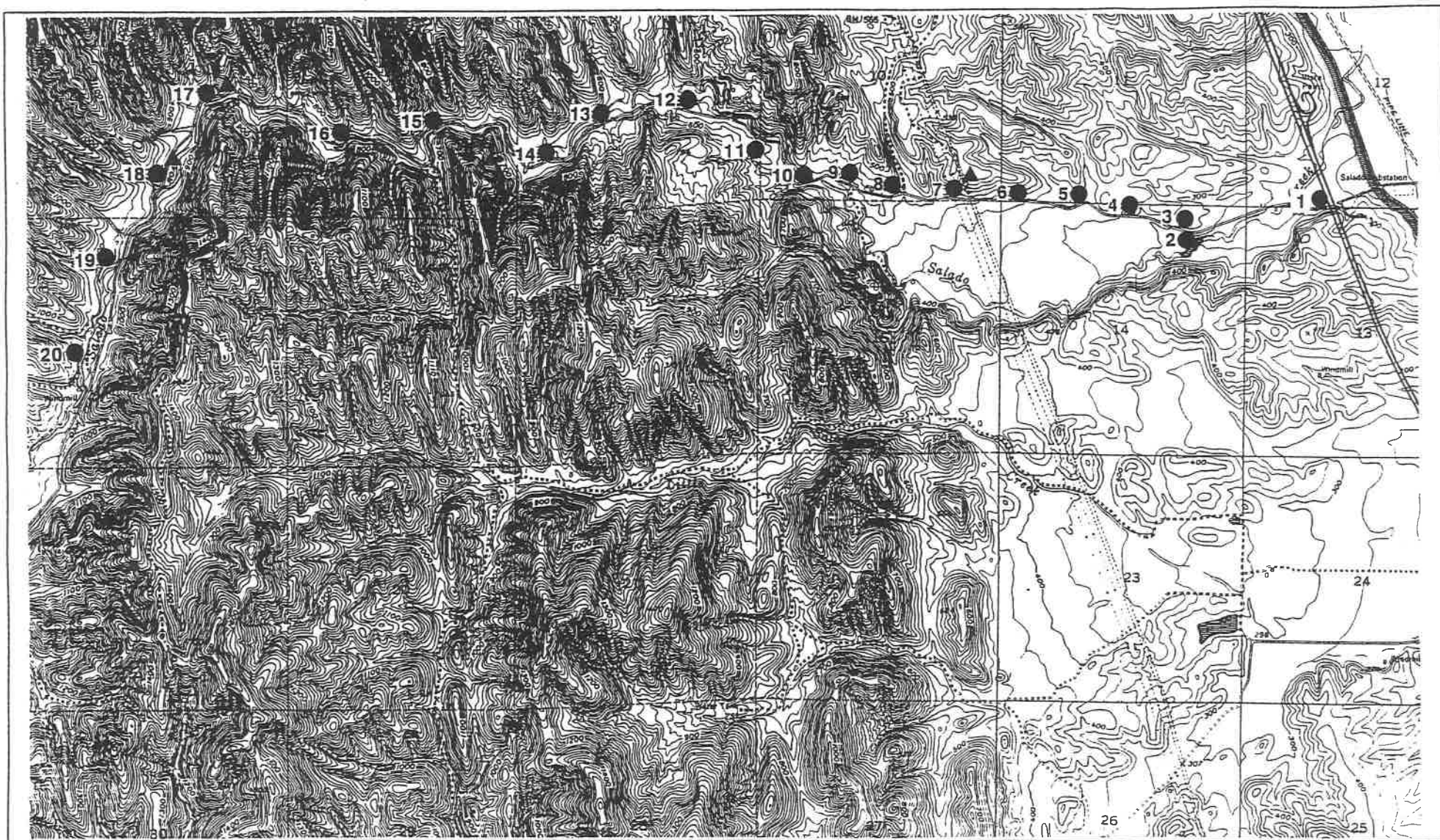
Evening spot-lighting surveys were conducted using 400,000 candle power spotlights. LSA biologists drove through the entire project site, using the existing network of jeep roads. Spot-lighting usually occurred between sunset and 0100 hours. Spot-lighting surveys were conducted on the evenings of February 14 and 28, 1990, July 23 - 26 and July 30-August 1, 1990, for a total of 31 spot-lighting hours (9.5 hours in February and 21.5 in July). The February spot-lighting surveys were conducted as part of a general biological reconnaissance of the project site. The July and August spot-lighting surveys were conducted in compliance with DFG Region 4 criteria for kit fox surveys.

Surveys were conducted by vehicle, driving 5-10 miles per hour, with observers illuminating the areas around the vehicle with the spot-light. The vehicle was stopped when eyeshine or movement was detected, and animals were identified using 7x35 binoculars. The activity, location, and time of each observation were recorded.

### ***Ground Transects***

Day time ground transects were conducted during the February, July, and August visits. The February ground transect surveys were conducted as part of a general biological reconnaissance of the project site. The July and August ground transect surveys were conducted in compliance with DFG Region 4 criteria for kit fox surveys. These involved walking transects searching for kit fox sign such as dens, tracks, scats (feces), and prey remains, and assessing kit fox foraging habitat. Particular attention was given to burrow aggregates of California ground squirrel. Kit fox feed on ground squirrels and will modify ground squirrel burrows for den sites. Dens were considered as potential kit fox dens if the entrance dimensions ranged within 4 to 12 inches in diameter and the burrows extended at least 4 feet into the ground. Potential kit fox den sites were recorded and burrow dimensions measured.

In Oak Flat Valley, 50 to 100-foot-wide transects were walked for a total of 44 person-hours. Along the 200-foot-wide road alignment, 50-foot-wide transects were walked along the length of the alignment for a total of 32 person-hours.



02-14-90 (DIG001)

↑  
N

LSA Scale in feet  
0 1000 2000

- Scent station
- ▲ Potential Kit Fox Den

Figure 3  
Oak Flat Road Alignment:  
Location of Scent Stations  
and Potential Kit Fox Dens

## RESULTS AND DISCUSSION

The eastern half of the Oak Flat Road corridor is located in San Joaquin kit fox habitat and range (O'Farrell 1983). The Oak Flat Valley is located to the west of known kit fox range. Appendix A discusses the natural history of the San Joaquin kit fox. The San Joaquin kit fox has been recorded from the Howard Ranch USGS quadrangle in 1975, approximately 10 miles south of the project site, and from the Solyo USGS quadrangle in 1973, approximately 18 miles north of the project site (CNDDB 1989). WESCO (1990) observed a kit fox approximately 1½ miles south of the Oak Flat Road and 1 mile west of I-5.

### ***FINDINGS***

No positive evidence of recent San Joaquin kit fox activity was detected by LSA biologists during the winter and summer 1990 surveys of the project site. A number of other animal species were encountered during the survey, including larger and potentially competing carnivores (Appendix B).

#### ***Scent Stations***

No San Joaquin kit fox tracks were recorded during the summer 1990 surveys. A number of tracks of other wildlife species were recorded at the scent stations, including coyote, small unidentified canid (possibly those of coyote pups observed in the vicinity of the scent station during spot-lighting surveys), large unidentified canid (possibly domestic dog), badger, Virginia opossum, California ground squirrel, kangaroo rat (sp.), mouse (sp.), and a bird (sp.) (Table 1). Horses destroyed or damaged scent station 5 on two nights, station 13 on one night, and station 14 on one night.

Wildlife species recorded at scent stations along the road alignment include coyote, domestic dog, domestic cat, badger, raccoon, rabbit (sp.), kangaroo rat (sp.), mouse (sp.), and greater roadrunner (Table 2). Cattle destroyed or damaged scent stations 5 and 6 on two nights, and station 15 on one night.

#### ***Spot-lighting Surveys***

No kit foxes were observed during the spot-lighting surveys. Wildlife species observed during the spot-lighting surveys include coyote, large unidentified canid, small unidentified canid, badger, bobcat, Virginia opossum, black-tailed deer, black-tailed hare, desert cottontail, kangaroo rat (sp.), bat (sp.), mouse (sp.), great horned owl, barn owl, common poorwill, and other birds (Table 3). The small unidentified canid was approximately the size of a large gray fox and was several hundred yards from the vehicle when observed. This canid was in view for only a 1-2 minutes. No distinguishing characteristics could be observed.

Table 1 - Scent Station Results for Oak Flat Valley

STATION	DATES (1990)						
	7/24	7/25	7/26	7/27	7/31	8/1	8/2
1	GS	MP	MP	GS LC	CO GS	CO GS	CO
2	GS	GS	*	GS	GS	CO	CO
3	*	KR MO	CO	KR	CO GS KR	CO	CO
4	GS	CO GS	CO MP	*	CO BA	CO OP	CO GS
5	(**)	*	*	HR	*	HR	HR
6		GS MO MP	GS	*	CO BA GS	GS	LC
7		GS	*	*	CO BA GS MP	GS	GS
8		KR GS	KR GS	*	GS	GS	*
9		*	CO	CO	GS MP	GS	*
10		GS	GS	GS	CO GS	*	*
11		*	*	*	GS	BA GS MP	*
12		GS	*	*	*	GS	GS
13		HR	*	*	*	KR GS	*
14		HR	KR	MP	*	CO	CO

**Table 1 (continued)**

**LEGEND:** GS = California ground squirrel  
MP = yellow-billed magpie  
CO = coyote  
LC = large canid (dog)  
KR = kangaroo rat (sp.)  
MO = mouse (sp.)  
BA = American badger  
OP = opossum  
HR = horse  
\* = no tracks observed

(\*\*) Stations 5 - 14 set on July 24



Table 2 - Scent Station Results for Oak Flat Road Alignment

STATION	DATES					
	8/10	8/13	8/14	8/15	8/16	8/16
1	GS	DC GS	DC	DC GS	DC	DC
2	DD	DC	DC RC	DC	DC	DC MO
3	MC	*	*	*	*	
4	MC	DC GS MO	DC	DC MO	*	C MO
5	*	CO COW	*	*	*	COW
6	*	COW	*	*	*	COW
7	*	*	*	*	*	*
8	*	*	*	*	*	*
9	MO	MO	*	*	GS MO	*
10	*	GS MO	GS	GS MO	*	MO
11	GS	GS	GS	GS	GS	GS
12	*	GS MO	*	GS	*	*
13	CG	*	GS	*	*	*
14	KR GS	GS MO RR	*	MO	RA	MO
15	HU GS	GS	GS	*	*	*
16	GS	GS	GS MO	GS MO	MO	MO

Table 2 (continued)

STATION	DATES					
	8/10	8/13	8/14	8/15	8/16	8/17
17	BA CG	CG MO	BA CG	CO	*	*
18	BA GS	GS	GS	GS	RA	*
19	GS	CO GS	GS	*	GS	BA GS
20	GS	CO BA GS	GS	*	GS	GS

LEGEND:

- GS = California ground squirrel
- DC = domestic cat
- DD = domestic dog
- RC = raccoon
- MO = mouse (sp.)
- CO = coyote
- COW = cow
- KR = kangaroo rat (sp)
- RA = rabbit (sp)
- RR = greater roadrunner
- HU = human
- BA = badger
- \* = no tracks observed



Table 3 - Spot-Lighting Results

SPECIES	DATES (1990)								
	2/14	2/28	7/23	7/24	7/25	7/26	7/30	7/31	8/1
Coyote	1	4	2	*	1	1	*	1	*
Large Canid	*	*	*	*	*	*	1	*	*
Small Canid	2	1	*	*	*	*	*	*	*
Bobcat	1	*	*	*	*	*	*	*	*
Badger	1	*	1	*	*	3	1	3	1
Desert Cotton-Tail	7	10	4	6	6	1	3	1	2
Black-tailed Hare	1	*	*	*	*	*	*	1	*
Mouse (sp.)	*	1	1	*	*	*	*	*	*
Kangaroo Rat (sp.)	*	*	4	2	3	3	1	1	*
Virginia Opossum	*	*	*	*	*	*	*	1	*
Bat (sp.)	*	*	1	1	*	*	1	*	1
Black-tailed Deer	*	*	*	*	1	4	*	*	*
Barn Owl	1	*	*	*	*	*	*	*	*
Great Horned Owl	*	*	*	*	*	*	*	1	*
Common Poorwill	*	*	*	*	*	*	1	*	*

Appendix B lists wildlife species observed during the winter and summer spotlight and summer scent station surveys.

### *Ground Transects*

No positively identified active or inactive kit fox dens, defined as dens which have evidence of present or past use by kit foxes, were located in Oak Flat Valley or the road alignment during the ground surveys. Potential San Joaquin kit fox den sites were found, with 19 occurring in Oak Flat Valley and 4 along the road alignment (Figures 2 and 3). These potential dens were 4 to 12 inches in diameter and extended at least 4 feet into the ground, as determined visually or by using steel tape measure. Den shape varied from circular, to taller-than-wide, to wider-than-tall. No kit fox sign were found at any of the potential den sites.

Nearly all of the potential dens located within the valley and road alignment showed evidence of present or past activities of California ground squirrels or badgers. Ground squirrels were very common throughout the project site and some of the potential dens showed recent evidence of ground squirrel activity, including sightings of ground squirrels in potential dens and the presence of squirrel tracks and scat around the entrances to potential dens. Evidence of badger activity included large claw marks on the sides of potential dens.

### *DISCUSSION*

San Joaquin kit foxes were not detected during the winter and summer surveys. The eastern half of the Oak Flat Road corridor is within the historic range of the San Joaquin kit fox. This is the portion of the site which is preferred denning habitat for the kit fox with its topographically low, rolling hills between I-5 and the base of the foot hills, approximately 1½ miles west of I-5. The steep hillsides with oak woodland and sage scrub and the Salado Creek stream canyon are marginal habitat for the kit fox (Orloff 1990). The Oak Flat Valley with its flat to rolling grasslands is physically suitable habitat but is isolated from known kit fox habitat to the east by steep, rocky hills and the Salado Creek Canyon dominated by oak woodland and Diablan sage scrub.

The San Joaquin kit fox has a home range which normally encompasses from approximately 640 to 1300 acres (1 to 2 square miles) (Orloff 1990). Unusually large home ranges of approximately 2,400 to 7,670 acres (3.75 to 12 square miles) are known (Orloff 1990). Because kit foxes can maintain fairly large home ranges, portions of the project site could be included as part of the home range(s) of kit foxes potentially occurring in the area, especially in the areas of low relief between I-5 and the base of the foothills.

California ground squirrels are very common throughout the entire project site. The ground squirrel is an important food source for the kit fox (Orloff 1990). Because of the abundance of ground squirrels, particularly in Oak Flat Valley, kit foxes could use Oak Flat Valley for foraging. However, because of the distance of Oak Flat Valley from the preferred habitat between the foothills and I-5 and the number of coyotes observed in the area, which are known to prey on kit fox (Orloff 1990), the potential for kit fox occurring regularly in Oak Flat Valley is likely to be low.

The steep and narrow western half of the Oak Flat Road alignment is marginal kit fox habitat. Hence, the potential for kit fox occurring within this portion of the road alignment corridor is also low. The low rolling grassland in the eastern portion of the road alignment is preferred kit fox habitat. Because of this and the known recent occurrence of San Joaquin kit fox to the north and south of the road alignment, and the abundance of California ground squirrels, it is likely that kit fox use this portion of the Oak Flat Road alignment while foraging for prey. The potential dens observed could be used by kit fox as shelter while foraging.

## REFERENCES

### LITERATURE CITED

- Bishop, Charles. 1970. Geologic map of the Upper Cretaceous on the west side of the northern San Joaquin Valley, Stanislaus and San Joaquin counties, California. California Division of Mines and Geology, San Francisco, California.
- California Department of Fish and Game (CDFG). 1990. Approved survey methodologies for sensitive species. San Joaquin kit fox, *Vulpes macrotis mutica*. Distributed by CDFG, Region 4, Fresno, California. 3 pp.
- California Natural Diversity Data Base (CNDDDB). 1989. Special Status Species occurrences report for the following U.S.G.S. quadrangles: Orestimba Peak, Newman, Wilcox Ridge, Copper Mountain, Mt. Stakes, Mt. Broadman, Patterson, Westley, and Solyo. California Department of Fish and Game, Natural Heritage Division, Sacramento, California.
- Halfpenny, J. 1986. A field guide to mammal tracking in western America. Johnson Books, Boulder, Colorado. 163 pp.
- Holland, R. F. 1986. Preliminary descriptions of the terrestrial natural communities of California. The Resources Agency, Sacramento, California. 156 pp.
- McLaughlin, J. C. and G. L. Huntington. 1968. Soils of westside Stanislaus area, California. Cooperative project between the Department of Soils and Plant Nutrition, Univ. of California, Davis and the County of Stanislaus, California. 100 pp.
- Murie, O. J. 1974. A field guide to animal tracks. Houghton Mifflin Company, Boston, Mass. 375 pp.
- O'Farrell, T. P. 1983. San Joaquin kit fox recovery plan. U.S. Fish and Wildlife Service, Portland, Oregon. 83 pp.
- Orloff, S. G. 1990. Survey techniques for the San Joaquin kit fox (*Vulpes macrotis mutica*). In: San Joaquin Valley endangered wildlife technical workshop; held May 15-16, 1990, by the San Joaquin Valley Chapter of the Wildlife Society, Clovis, California.
- Western Ecological Services, Inc. (WESCO). May 1990. Lakeborough Draft Environmental Impact Report, for the Stanislaus County Planning Department, Modesto, California.

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## APPENDIX A

### SAN JOAQUIN KIT FOX NATURAL HISTORY

#### LISTED STATUS

The San Joaquin kit fox (*Vulpes macrotis mutica*) is listed as endangered by the U.S. Fish and Wildlife Service (1976). The San Joaquin kit fox was listed as rare by the Fish and Game Commission in 1976 under the California Endangered Species Act of 1970. As of January 1985, the California Department of Fish and Game reclassified the San Joaquin kit fox to its new status as threatened when all designated "rare" species were changed to "threatened." No change in status was implied by the change in terminology.

#### DISTRIBUTION AND ABUNDANCE

Prior to 1930, the San Joaquin kit fox occurred on the dry plains of the San Joaquin Valley, ranging south from near the mouth of Tejon Canyon, Kern County, northward along the west side of the valley to Tracy, San Joaquin County, and on the east side to La Grange, Stanislaus County (Grinnell et al. 1937). Post-1930 range was reduced to the southern and western portions of the San Joaquin Valley (Grinnell et al. 1937). Contemporary distribution of the San Joaquin kit fox includes Alameda, Contra Costa, Fresno, Kern, Kings, Merced, San Benito, San Joaquin, and San Luis Obispo counties, with apparent range extensions into Monterey, Santa Barbara, and Santa Clara counties (Laughrin 1970, Jensen 1972, Morrell 1975).

Grinnell and his colleagues (1937) estimated that prior to 1925 the population density of kit foxes on the western side of the San Joaquin Valley was about one per square mile. Laughrin (1970) indicated that population densities had decreased by 1969 to one fox per 1-2.8 square miles (640-1,792 acres) for a total population of 1,000 and 3,000 animals. Population estimates from a one-year study by Morrell (1975) ranged from 5,066 to 14,831 depending on assumptions made about kit fox life history and available suitable habitat. Morrell (1975) concluded with a population estimate of about 10,000 animals in the 14 counties known to support kit fox. Eighty-five percent of the estimated population in 1975 was thought to occur in 6 of the 14 counties: Fresno, Kern, Kings, Monterey, San Luis Obispo, and Tulare, and half of this estimate occurred in Kern and San Luis Obispo counties. When Morrell's data are adjusted for the amount of habitat loss between 1925 and 1975, a population decrease of 20 to 43 percent is inferred (if previous population estimates were reliable) (O'Farrell 1983).

#### LIFE HISTORY

Kit foxes are characterized by small body size averaging 4-5 pounds. Build is slender, and ears are relatively larger than other North American canids. A long (about 40 percent of body length), cylindrical, bushy tail is slightly

tapered with black at the tip (Grinnell et al. 1937, McGrew 1979). Dorsal coloration is grizzled gray with buffy-tan to yellowish-gray on the sides to white ventrally. Of the eight subspecies of kit fox (*Vulpes macrotis*), the San Joaquin kit fox (*V. m. mutica*) is the largest in skeletal measurements, body size, and weight (Grinnell et al. 1937).

This predator is essentially nocturnal, although some diurnal activity occurs near the den when pups are present (Morrell 1972). Adults may lie outside the den in the afternoon, especially during the summer and fall. Most activity begins near sunset and continues sporadically throughout the night. San Joaquin kit foxes are active above ground the year around.

Kit foxes prey upon rodents, lagomorphs (i.e., rabbits and hares), small birds, reptiles, and arthropods (Grinnell et al. 1937, Hawbecker 1943, Knapp 1978, Fisher 1981). The often stated association of kit foxes with kangaroo rats (*Dipodomys* spp.) may be overrated, as some studies indicate that other animals such as lagomorphs are important prey, especially when pups are being reared (Egoscue 1962, Laughrin 1970, Knapp 1978). Fisher (1981) suggested that kit fox may be opportunistic, having the ability to switch to diurnal prey during periods when populations of nocturnal prey are low.

California ground squirrel (*Spermophilus beechyi*) is the most important prey in the northern range (Biotech 1983, Hall 1983), and at Camp Roberts, Monterey and San Luis Obispo counties (T. Rado pers. comm.). The ecological relationship between San Joaquin kit fox and California ground squirrels is poorly understood, but Hall (1983) reported the use of California ground squirrels as an important prey the year round in Contra Costa County. Lagomorphs are important throughout the range. San Joaquin kit fox also scavenge carrion, particularly road kills (Morrell 1972).

Vixens prepare dens for rearing pups between September and October. Breeding age for both sexes is about 22 months old. Copulation occurs in late December to early January (Morrell 1972). Most fox pairs demonstrate a monogamous pair bond, although some may be polygamous (Egoscue 1956, 1962, Morrell 1972).

Litters, commonly ranging from 3 to 5 pups are born in late February to March (Egoscue 1962, Morrell 1972). Pups emerge from the den at about one month old (Morrell 1972). Both parents provide food. Whole prey is brought back to the natal den (Egoscue 1962, McGrew 1979). Often the male parent stays in a smaller separate den during this period (Egoscue 1962). Four- to five-month-old pups are able to venture widely over their maternal range. Pups generally disperse by October, when family groups begin to split up (Morrell 1972).

## DEN CHARACTERISTICS

Kit fox dens are more than a place to rear pups; dens are a critical habitat component. Egoscue (1956, 1962), O'Farrell and Gilbertson (1979), Golightly (1981), and Hardenbrook (1985) observed a grouped or non-random distribution of dens. Morrell (1972) reported that family groups and individuals will use several dens throughout the year. Natal dens are used in successive years by the same mated pair or family group. Egoscue (1956) and O'Farrell (1983) have speculated that den sites may be used by successive generations. Golightly (1981) and Golightly and Ohmart (1983, 1984) demonstrated that dens serve as an essential refuge from the harsh environmental conditions. Thus, kit fox can avoid lethal water loss and overheating in the summer and greater metabolic costs in the winter.

Kit fox generally construct dens in loose textured soils on well-drained sites (Grinnell et al. 1937, Hall 1946, Egoscue 1962, Laughrin 1970, Morrell 1972). Preferred soils are relatively free of stone to depths of 3 to 4.5 feet. Dens usually are absent in areas where soils are shallow, because of proximity of parent material (e.g., rock) or proximity to impenetrable hardpans or caliche layers. Results from a microhabitat investigation by Golightly (1981) suggested significant differences in soil characteristics between areas with sites and den-free areas.

San Joaquin kit fox dens are associated with loose-textured soils in the southern portion of their range (Morrell 1975, O'Farrell 1983), but occur in harder clay soils in their northern ranges (Biotech 1983, Hall 1983). According to O'Farrell (1983), the establishment of complete dens in numerous soil types refutes the assumption that San Joaquin kit fox are weak diggers and only improve existing ground squirrel or badger burrows. San Joaquin kit foxes do not den in saturated soils, areas where high water tables exist, or in areas subject to periodic flooding (McCue et al. 1981, O'Farrell 1983).

Although San Joaquin kit fox inhabit foothills as well as valley floor, fox generally are found where slopes are less than 40° F. Natal dens are located on low relief of about 6° (O'Farrell 1983).

Dens have single or multiple entrances. The entrances range from 6 to 10 inches in diameter and are usually taller than wide to prevent entry by coyotes or badgers (Hall 1983, O'Farrell 1983). Dens used for escape or daily shelter are more common and generally smaller than natal dens.

Maternal and pupping dens can be distinguished from dens used at other times of the year. Dens containing young typically have as many as six entrances (range 2-18) with numerous scats (i.e., feces) and prey remains near these entrances (Morrell 1972, O'Farrell et al. 1980).



Natal dens may be reused in consecutive years (Egoscue 1962). Some biologists believe that natal dens are linked to ancestral breeding sites and thus are important to successful reproduction.

Dens may be occupied by unmated individuals, mated pairs, or family groups. Kit foxes generally maintain many dens, and most are vacant at any given time (Morrell 1972). An individual fox may use over twenty dens in a month (Morrell 1972, Hall 1983). Possible causes for den changes are den infestation by ectoparasites or local depletion of prey.

Active dens may sometimes be distinguished by the presence of scats, prey remains, tracks, or matted vegetation at the entrance (Grinnell et al. 1937, O'Farrell et al. 1980). Evidence of den use, however, is not always apparent (Morrell 1972); 70 percent of the dens used by radio-collared San Joaquin kit foxes in Contra Costa county showed no visible sign of use (Hall 1983).

During the summer and fall, most adult San Joaquin kit foxes are solitary (Morrell 1972), but juveniles (less than 22 months old) often den with siblings (Hall 1983). The frequency of independent denning by juveniles is positively correlated with survivorship (Hall 1983). In September and October, adult female San Joaquin kit fox occupy and begin to clean and enlarge maternal dens (Morrell 1972).

## ***HABITAT REQUIREMENTS***

Kit foxes are associated with steppe and desert environments below 5,000 feet elevation in the southwestern U.S. and Mexico (Hall 1946, McGrew 1979). In California, San Joaquin kit fox inhabit primarily valley and foothill areas supporting alkali sink and California prairie vegetation associations; foothill woodland association are marginal habitats (O'Farrell 1983).

## ***Factors Affecting Distribution***

In the last 50 years, the San Joaquin kit fox population has apparently declined 20-43 percent (O'Farrell 1983). The greatest threat to the San Joaquin kit fox is loss of habitat due to agricultural, industrial, and urban development (Laughrin 1978, Jensen 1972, Morrell 1972, 1975). The home range of the San Joaquin kit fox has been estimated to range from 260 hectares (ha) (640 acres) to 463 ha (1,144 acres) (Morrell 1972 and Zoellick et al. 1987, in Orloff 1990). Unusually large home ranges of between 972 ha (2,400 acres) and 3,104 ha (7,667 acres) were reported for kit foxes near Kesterson Reservoir in Merced County (Paveglio and Clifton 1988, in Orloff 1990). In the southern part of their range, less than 6.7 percent of the typical native habitat remained undisturbed (USFWS 1981), as most of the optimal San Joaquin kit fox habitat has been converted to agriculture (Jensen 1972).

San Joaquin kit foxes appear reluctant to vacate disturbed home ranges (Knapp 1978). However, habitat loss has occurred at an "alarming" rate

(Jensen 1972, O'Farrell 1983), and some San Joaquin kit fox appear to have moved into less desirable foothill habitats (Jensen 1972).

Limiting factors acting on San Joaquin kit fox populations include the availability of adequate denning sites, foraging areas, and prey. The possibility that a low density of escape dens may limit San Joaquin kit fox populations has been suggested but not investigated (Hall 1983). San Joaquin kit fox require about 600-1,200 acres (0.9-1.9 square miles) (Morrell 1972, Knapp 1978), but can apparently share large portions of this home range with other San Joaquin kit foxes (Morrell 1972). Balestreri (1981) reported nearly four San Joaquin kit fox per 640 acres (one square mile) of suitable habitat at Camp Roberts, and similarly dense populations have been reported for the Elk Hills (O'Farrell 1980) and the Elkhorn Plains (O'Farrell 1983 and McCue et al. 1981).

They are further limited by other canids through competitive exclusion and predation (Morrell 1975, Hall 1983, O'Farrell 1983). Coyotes, golden eagles, and badgers are known to prey on San Joaquin kit fox (Grinnell et al 1937, Knapp 1978, Hardenbrook 1985). Hall (1983) reported about 80% mortality of San Joaquin kit fox in Contra Costa County was due to large canids, all in areas offering few escape dens. San Joaquin kit fox may compete with gray fox (*Urocyon cinereoargenteus*), as San Joaquin kit foxes are forced into areas containing oak woodland and riparian habitats (Laughrin 1970). Other sources of natural mortality include starvation when prey populations decline (Morrell 1972, O'Farrell and Gilbertson 1979), debilitation and death due to parasites and disease (O'Farrell 1983), and den cave-ins (O'Farrell and Gilbertson 1979).

Anthropogenic (human caused) mortality has been significant (Morrell 1975, O'Farrell 1983). In the early 1900s San Joaquin kit fox were trapped, others were shot, and coyote poisoning campaigns destroyed San Joaquin kit foxes "by the hundreds" (Grinnell et al. 1937). One trapper reported catching 100 foxes in one week (Grinnell et al. 1937). The present impact on San Joaquin kit foxes from illegal or incidental trapping and shooting is undetermined (O'Farrell 1983). Secondary poisoning and depletion of prey base due to continuing rodenticide use have had an undetermined impact on San Joaquin kit foxes (Swick 1973, Morrell 1975, O'Farrell 1983). Currently, road kills and suffocation due to den cave-ins caused by land clearing (e.g., plowing or bulldozing over occupied dens) and other heavy equipment operation are sources of San Joaquin kit fox mortality (Morrell 1975, Knapp 1978).

In summary, as cited in the San Joaquin kit fox Recovery Plan (O'Farrell 1983), "the greatest known threat to the San Joaquin kit fox has been, and will continue to be loss of habitat associated with agricultural, urban, industrial, and mineral development." Much of the habitat has been altered to various degrees by livestock overgrazing, petroleum mining activities, and windfarm developments (Jensen 1972, Morrell 1972, 1975, Hall 1983, O'Farrell 1983). Laughrin (1970) concludes that the decline of the San Joaquin kit fox is a "direct result of man's activities."

## REFERENCES

## LITERATURE CITED

- Balestrieri, A. N. 1981. Status of the San Joaquin kit fox at Camp Roberts, California, 1981. Unpubl. report. California Polytechnic State University, San Luis Obispo, CA. 30 pp.
- Biotech. 1983. A study of the biotic resources of the Carnegie New Town Project, San Joaquin, California. Unpubl. report prepared for the County of San Joaquin. 33 pp.
- Egoscue, H. J. 1956. Preliminary studies of the kit fox in Utah. J. Mammal. 37:351-357.
- Egoscue, H. J. 1962. Ecology and life history of the kit fox in Tooele County, Utah. Ecology. 43:481-497.
- Fisher, J. L., 1981. Kit fox diet in south-central Arizona. Unpubl. M.S. Thesis, Univ. Arizona. 19 pp.
- Golightly, R. T., Jr. 1981. Comparative energetics of two desert canids: the coyote (*Canis latrans*) and the kit fox (*Vulpes macrotis*). Ph.D. dissertation. Dept. of Zoology, Arizona State University, Tempe, Arizona. 174 pp.
- Golightly, R. T., Jr. and R. D. Ohmart, 1983. Metabolism and body temperature of two desert canids: coyotes and kit foxes. J. Mammal. 64:624-635.
- Golightly, R. T., Jr. and R. D. Ohmart, 1984. Water economy of two desert canids: coyote and kit fox. J. Mammal. 65:51-58.
- Grinnell, J., J. S. Dixon, and J. M. Linsdale. 1937. Fur-bearing mammals of California. Vol 2. University of California Press, Berkeley. PP. 399-420.
- Hall, E. R. 1946. Mammals of Nevada. University of California Press, Berkeley.
- Hall, F.A. Jr. 1983. Status of the San Joaquin kit fox, *Vulpes macrotis mutica* at the Bethany wind turbine generating project site, Alameda County, California. Department of Fish and Game Report. 32 pp.
- Hardenbrook, D. B., 1985. Habitat usage and den sites of kit foxes in Nevada. Nevada Dept. of Wildlife Annual Job Progress Report, August. Supported by Federal Aid in Wildlife Restoration Project W-48-R-15, Study. R-XTX, Job 1. Unpubl. 17 pp.
- Hawbecker, A. C. 1943. Food of the San Joaquin kit fox. J. Mammal. 24:499.

- Jensen, C. C. 1972. San Joaquin kit fox distribution. U.S. Fish and Wildlife Service Report, Sacramento, California.
- Knapp, D. K. 1978. Effects of agricultural development in Kern County, California, on the San Joaquin kit fox in 1977. Final Report, Project E-1-1, Job V-1.21, Non-Game Wildlife Investigations, California Department of Fish and Game, Sacramento, California.
- Laughrin, L. 1970. San Joaquin kit fox. Its distribution and abundance. Admin. Rpt. 70-2, California Department of Fish and Game Wildlife Management Branch, Sacramento, California.
- McCue, P., T. Kato, M. L. Sauls, T. P. O'Farrell. 1981. Inventory of San Joaquin kit fox on land proposed as Phase II, Kesterson Reservoir, Merced County, California. Topical Report EGG 1183-2426, EG&G, Santa Barbara Operations, U.S. Department of Energy, Goleta, California.
- McGrew, J. C., 1979. *Vulpes macrotis*. Amer. Soc. Mammal. Mammalian Species No. 123. 6 pp.
- Morrell, S. H. 1972. Life history of the San Joaquin kit fox. California Fish and Game. 53:162-174.
- Morrell, S. H. 1975. San Joaquin fox distribution and abundance in 1975. Administrative Report 75-3, California Department of Fish and Game, Wildlife Management Branch, Sacramento, California.
- O'Farrell, T. P. and L. Gilbertson. 1979. Ecological life history of the desert kit fox in the Mojave desert of southern California. Final Report U.S. Bureau of Land Management, Desert Plan Staff, Riverside, California.
- O'Farrell, T. P., 1983. San Joaquin kit fox recovery plan. U.S. Fish & Wildlife Service, Portland, Oregon. 83 pp.
- O'Farrell, T. P., T. Kato, P. McCue, and M. L. Sauls. 1980. Inventory of San Joaquin kit fox on BLM lands in southern and southwestern San Joaquin Valley. Final Report, EGG 1183-2400, EG&G, Santa Barbara Operations, U.S. Department of Energy, Goleta, California.
- Orloff, S. G. 1990. Survey techniques for the San Joaquin kit fox (*Vulpes macrotis mutica*). In: San Joaquin Valley endangered wildlife technical workshop; held May 15-16, 1990, by the San Joaquin Valley Chapter of the Wildlife Society, Clovis, California.
- Swick, C. D., 1973. San Joaquin kit fox - an impact report of secondary hazards of aerial application of 1080 grain baits for ground squirrel control in San Luis Obispo County. Special Wildlife Investigations

Progress Report W-54-R4, California Department of Fish & Game,  
Sacramento, CA.

U.S. Fish and Wildlife Service (USFWS). 1976. Endangered and threatened  
wildlife and plants. Republication of the list of species, Fed. Register.  
41(208):47180-47198.

U.S. Fish and Wildlife Service (USFWS). 1981. Blunt-nosed leopard lizard  
recovery plan. U.S. Fish Wild.Serv., Portland. 32 pp.

**APPENDIX B**  
**LIST OF WILDLIFE SPECIES OBSERVED**  
**IN SPOT-LIGHT AND SCENT STATION SURVEYS**

SPECIES	SCIENTIFIC NAME
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**AMPHIBIANS**

Western Toad	<i>Bufo boreas</i>
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**BIRDS**

Killdeer	<i>Charadrius vociferus</i>
Common Snipe	<i>Gallinago gallinago</i>
Greater Roadrunner	<i>Geococcyx californianus</i>
Barn Owl	<i>Tyto alba</i>
Great Horned Owl	<i>Bubo virginianus</i>

**MAMMALS**

Virginia Opossum	<i>Didelphis virginiana</i>
Bat (sp.)	
Desert Cottontail	<i>Sylvilagus audubonii</i>
Black-tailed Hare (jackrabbit)	<i>Lepus californicus</i>
California ground squirrel	<i>Spermophilus beecheyi</i>
Kangaroo Rat (sp.)	<i>Dipodomys</i> sp.
Mouse (sp.)	
Coyote	<i>Canis latrans</i>
Domestic dog	<i>Canis domesticus</i>
Canid (sp.)	<i>Canis</i> sp.
Raccoon	<i>Procyon lotor</i>
Badger	<i>Taxidea taxus</i>
Bobcat	<i>Lynx rufus</i>
Domestic cat	<i>Felis domesticus</i>
Black-tailed deer	<i>Odocoileus hemionus</i>

ATTACHMENT A

LISTED AND PROPOSED ENDANGERED AND THREATENED SPECIES AND  
CANDIDATE SPECIES THAT MAY OCCUR IN THE AREA OF THE PROPOSED  
DIABLO GRANDE PROJECT, BIG OAKS FLAT RANCH,  
STANISLAUS COUNTY, CALIFORNIA  
(1-1-90-SP-451)

Listed Species

Mammals

San Joaquin kit fox, *Vulpes macrotis mutica* (E)

Candidate Species

Mammals.

Pacific western big-eared bat, *Plecotus townsendii townsendii* (2)  
greater western mastiff-bat, *Eumops perotis californicus* (2)  
San Joaquin pocket mouse, *Perognathus inornatus inornatus* (2)

Amphibians.

California tiger salamander, *Ambystoma tigrinum californiense* (2)  
California red-legged frog, *Rana aurora draytonii* (2)

Invertebrates

San Joaquin dune beetle, *Coelus gracilis* (1)  
Ciervo aegialian scarab beetle, *Aegialia concinna* (2)

Plants

diamond-petaled poppy, *Eschscholzia rhombipetala* (2)

- (E)--Endangered      (T)--Threatened      (CH)--Critical Habitat  
(1)--Category 1: Taxa for which the Fish and Wildlife Service has sufficient biological information to support a proposal to list as endangered or threatened.  
(2)--Category 2: Taxa for which existing information indicated may warrant listing, but for which substantial biological information to support a proposed rule is lacking.

## ATTACHMENT B

### FEDERAL AGENCIES' RESPONSIBILITIES UNDER SECTIONS 7(a) and (c) OF THE ENDANGERED SPECIES ACT

#### SECTION 7(a) Consultation/Conference

Requires: 1) Federal agencies to utilize their authorities to carry out programs to conserve endangered and threatened species; 2) Consultation with FWS when a Federal action may affect a listed endangered or threatened species to insure that any action authorized, funded or carried out by a Federal agency is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. The process is initiated by the Federal agency after determining the action may affect a listed species; and 3) Conference with FWS when a Federal action is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat.

#### SECTION 7(c) Biological Assessment--Major Construction Activity<sup>1</sup>

Requires Federal agencies or their designees to prepare a Biological Assessment (BA) for major construction activities. The BA analyzes the effects of the action<sup>2</sup> on listed and proposed species. The process begins with a Federal agency requesting from FWS a list of proposed and listed threatened and endangered species. The BA should be completed within 180 days after its initiation (or within such a time period as is mutually agreeable). If the BA is not initiated within 90 days of receipt of the list, the accuracy of the species list should be informally verified with our Service. No irreversible commitment of resources is to be made during the BA process which would foreclose reasonable and prudent alternatives to protect endangered species. Planning, design, and administrative actions may proceed; however, no construction may begin.

We recommend the following for inclusion in the BA: an on-site inspection of the area affected by the proposal which may include a detailed survey of the area to determine if the species or suitable habitat are present; a review of literature and scientific data to determine species' distribution, habitat needs, and other biological requirements; interviews with experts, including those within FWS, State conservation departments, universities and others who may have data not yet published in scientific literature; an analysis of the effects of the proposal on the species in terms of individuals and populations, including consideration of indirect effects of the proposal on the species and its habitat; an analysis of alternative actions considered. The BA should document the results, including a discussion of study methods used, any problems encountered, and other relevant information. The BA should conclude whether or not a listed or proposed species will be affected. Upon completion, the BA should be forwarded to our office.

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<sup>1</sup> A construction project (or other undertaking having similar physical impacts) which is a major Federal action significantly affecting the quality of the human environment as referred to in NEPA (42 U.S.C. 4332(2)C).

<sup>2</sup> "Effects of the action" refers to the direct and indirect effects on an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action.





# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Fish and Wildlife Enhancement

Sacramento Field Office

2800 Cottage Way, Room E-1623  
Sacramento, California 95825-1846

In Reply Refer To:

1-1-90-SP-451

April 2, 1990

Mr. Malcome J. Sproul  
LSA Associates  
157 Park Place  
Pt. Richmond, California 95925

Subject: Species List for the Proposed Diablo Grande Project, Big Oaks Flat Ranch, Stanislaus County, California

Dear Mr. Sproul:

As requested in your letter, dated February 22, 1990, we are providing a list of the federally listed endangered and threatened species that may be present in the subject project area in Attachment A. To the best of our knowledge, no proposed species occur within the area. This list fulfills the requirement of the Fish and Wildlife Service to provide a species list pursuant to Section 7(c) of the Endangered Species Act, as amended.

Some pertinent information concerning the distribution, life history, habitat requirements, and published references for the listed species is also attached. This information may be helpful in preparing the biological assessment for this project, if one is required. Please see Attachment B for a discussion of the responsibilities Federal agencies have under Section 7(c) of the Act and the conditions under which a biological assessment must be prepared by the lead Federal agency or its designated non-Federal representative.

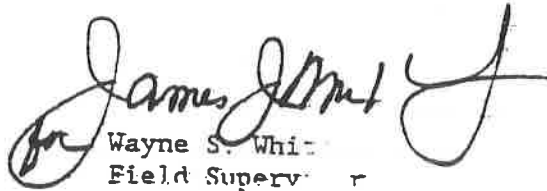
Formal consultation, pursuant to 50 CFR § 402.14, should be initiated by the federal agency if you determine that a listed species may be affected by the proposed project. Informal consultation may be utilized prior to a written request for formal consultation to exchange information and resolve conflicts with respect to a listed species. If a biological assessment is required, and it is not initiated within 90 days of your receipt of this letter, you should informally verify the accuracy of this list with our office.

Also, for your consideration, we have included a list of the candidate species that may be present in the project area. (See Attachment A.) These species are currently being reviewed by our Service and are under consideration for possible listing as endangered or threatened. Candidate species have no protection under the Endangered Species Act, but are included for your consideration as it is possible that one or more of these candidates could be proposed and listed before the subject project is completed. Should the biological assessment reveal that candidate species may be adversely affected, you may wish to contact our office for technical assistance. One of the

potential benefits from such technical assistance is that by exploring alternatives early in the planning process, it may be possible to avoid conflicts that could otherwise develop, should a candidate species become listed before the project is completed.

Please contact Peggie Kohl at 916/978-4866 if you have any questions regarding the attached list or your responsibilities under the Endangered Species Act.

Sincerely,

  
Wayne S. White  
Field Supervisor

Attachments

## **SAN JOAQUIN KIT FOX**

*(Vulpes macrotis mutica)*

**CLASSIFICATION:** Endangered (32 Federal Register 4001).

**CRITICAL HABITAT:**

No critical habitat has been designated for the San Joaquin kit fox. The Recovery Plan for this taxon divides the extant range into three distinct management zones. Zone 1, including the kit fox population in western Kern and eastern San Luis Obispo Counties, is targeted for highest recovery effort. Zone 2, including portions of Kern, San Luis Obispo, Tulare, Kings, Fresno, Monterey and San Benito Counties, is targeted for intermediate recovery effort. Zone 3, including remaining portions of the geographic range, is targeted for a modest recovery effort.

**DESCRIPTION:**

The San Joaquin kit fox is approximately 20 inches in total length. The prominently black-tipped tail has a length of about 12 inches. Adults weigh approximately 5 pounds. Coloration is grayish dorsally, changing from rusty brown to yellowish along the sides, and white ventrally. The body is typically lanky in appearance. Adults stand between 9 and 12 inches at the shoulder. Foraging for a variety of rodents and lagomorphs typically occurs at night, although animals have been observed stalking California ground squirrels (*Spermophilus beecheyi*) during daylight hours, and pups may be observed during the day at den sites. Dens are usually constructed on gentle slopes or level areas. As few as one or as many as 32 or more entrances may be excavated at each site. Kit fox will also opportunistically utilize man-made structures such as culverts or pipes, or may enlarge abandoned ground squirrel burrows as denning sites.

**DISTRIBUTION:**

The San Joaquin kit fox was historically distributed within an 8,700 square mile area in central California, extending in the north from the vicinity of Tracy in the San Joaquin Valley, south to the general vicinity of Bakersfield. Intensive agriculture, urbanization, and other land-modifying actions have eliminated extensive portions of this area. Kit fox are currently limited to remaining grassland, saltbush, open woodland, and alkaline sink valley floor habitats, and similar habitats located along western bordering foothills and adjacent valleys and plains. They occupy portions of western Kern, eastern San Luis Obispo, western Tulare, Kings, western Fresno, western Merced, western Stanislaus, southwestern San Joaquin, Alameda, Contra Costa, Santa Clara, San Benito, Monterey, and extreme northern Santa Barbara Counties.

**SPECIAL CONSIDERATIONS:**

The San Joaquin kit fox is listed as "threatened" by the State of California. It therefore enjoys protection afforded by State law. State agencies are required to

Remaining grassland is mostly limited to the slopes of the western foothills, and therefore less than optimum for the burrowing owl. No burrowing owls were detected during WESCO surveys.

The tri-colored blackbird typically occurs near fresh water, especially marshy areas. Most favored sites for nesting colonies are heavy growths of cattails and bulrush. Flooded lands, margins of ponds, and grassy fields in summer and winter constitute typical foraging terrain (Grinnell and Miller 1944). Suitable nesting and foraging habitat for the tri-colored blackbird is present in the project area and includes riparian areas along the three major creek channels, seasonal wetlands, and the two man-made ponds. Irrigation channels dissecting cultivated land and supporting dense emergent vegetation are also potential habitat. The CNDDB has several regional records for this species. The nearest record is for a nesting colony about two miles north of the project area. During WESCO surveys, tri-colored black birds were found to frequent riparian/freshwater marsh habitats on the proposed project site. Eight observations of tri-colored blackbirds were made; however, no nesting colonies were found. Locations of individual observations included Crow Creek and the two farm ponds (Figure III-D-1). The intact remains of one tri-colored blackbird were found near the southern pond. A potential cause of mortality is the ingestion of poison bait widely distributed for rodent control.

The San Joaquin pocket mouse is known to flat ground and low hills of the Central Valley where it occurs in grassland or weedy habitats on fine textured soils (Jameson and Peeters 1988). Grassland, sandy outcrop, and sage scrub habitats on the project site provide potential habitat for this species. Although specific surveys for San Joaquin pocket mouse were not conducted, the remains of one pocket mouse were found on the project site (Figure III-D-1). Prey remains beneath a loggerhead shrike nest tree were identified as the hindquarters of *Perognathus* sp. The project site is within the potential range of three pocket mice: the California pocket mouse (*P. californicus*), little pocket mouse (*P. longimembris*), and San Joaquin pocket mouse. Because the specimen was not intact, positive identification could not be made. Live-trapping studies would be necessary to determine the presence of this candidate species.

The San Joaquin kit fox occupies annual grassland in the northern San Joaquin Valley and western foothills (DFG 1988). Annual grassland and small mammal populations in the project area provide suitable habitat for the kit fox. Significant ground squirrel populations and friable soils were noted on the eastern and northern portions of the project site, respectively. One individual kit fox was located on the project site during a nocturnal survey conducted on April 11. This kit fox was observed briefly within a walnut orchard, centrally located in the project area (Figure III-D-1). No other direct observations of kit fox were made. Re-examination of a potentially active fox den identified in the Draft Biological Assessment (WESCO 1988), and located along Little Salado Creek (Figure III-D-1), revealed no sign of recent use. Information from various sources indicate that a density of 1 kit fox per square mile in suitable habitat is a reasonable figure to use when estimating populations (CDFG 1989). However, small populations are generally found in the narrow corridor between I-5 and the Interior Coast Range north of Los Banos. It is estimated that 1 to 2 kit fox frequent the project area. Other canids observed include red fox (east of I-5) and coyote.

The American badger occupies a diversity of habitats. Principal habitat requirements seem to be sufficient prey (i.e., pocket gophers, ground squirrels), friable soils, and relatively open, uncultivated ground (Williams 1986). Two separate observations of American badger were made during nocturnal surveys. The proximity of these observations, in ruderal grassland and orchard